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ASSESSMENT OF THE FINANCIAL SUSTAINABILITY OF LOCAL BUDGETS UNDER THE INFLUENCE OF REFORMS AND EXTERNAL CHALLENGES

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Abstract. The economic development of the country and its regions, the level of well-being of the population, the quality of public services and the availability of public services directly depend on effective local self-government. The article assesses the financial sustainability of local budgets in Ukraine over the past twelve years, identifying the main trends, and examines the changes caused by the implementation of reforms in the country and other external challenges, including the armed aggression against Ukraine. The purpose of the study is to determine further prospects for the development of Ukraine's regions and the formation of effective local self-government, taking into account the results of the analysis of the main indicators of financial sustainability of local budgets. To conduct the study of budgets, a comprehensive methodological approach was applied by calculating an integral indicator, which is the sum of aggregated standardised indicators for three groups of indicators: balance, financial autonomy and efficiency. The study has revealed that there is currently no unified approach to assessing the financial sustainability of local budgets, and scholars propose different methodological approaches with a diverse list of indicators. Based on the generalisation of methodological approaches, the authors propose a system of indicators for assessing the financial sustainability of local budgets in Ukraine. The paper assesses the financial sustainability of local budgets for the period of 2012-2023 with the calculation of an integral indicator and graphical presentation of the analysis results. The study has shown the effectiveness of the implemented reforms in Ukraine, as well as the ability of local authorities to quickly adapt to changes caused by negative external influences. In general, local budgets of Ukraine are characterised by positive trends in their development, with the main indicators of financial sustainability of local budgets being within or close to the recommended values. The dynamics of the integral indicator shows a steady upward trend, with its value increasing from 0.84 in 2012 to 3.12 in 2023, i.e., more than 3 times. The authors conclude that it is advisable to introduce continuous monitoring of the financial sustainability of local budgets according to a single accepted methodology, which will allow the authorities to timely identify changes and promptly make appropriate management decisions, taking into account existing risks, in order to solve problems and form a balanced development strategy.

Keywords: local self-government, local budgets, financial sustainability of budgets, taxes, taxation, large taxpayers, macro-financial indicators, integrated indicator of financial sustainability, budget balance, financial autonomy, budget efficiency, regional development strategy, decentralisation.

JEL Classification: H70, H72, C13

1. Introduction

Since the declaration of independence, Ukraine has been implementing reforms aimed at economic development, improvement of the social sphere, and enhancement of the welfare and social protection of

the population. In today's realities, the issue of regional development is extremely important, as it directly depends on their financial potential. Local budgets are an effective tool for regulating the socio-economic development of territories, so it is necessary to

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ensure their balance, achievement of the optimal level of distribution of financial resources between budgets, and efficient use of budget funds. "It is important for local governments to ensure the sustainability, dynamism, and balance of economic growth in administrative-territorial units, to implement the main priorities of budget policy at the local level, including the directions for identifying effective sources of local budget revenues, which should be carried out taking into account the need to ensure a sufficient level of institutional transformation of the budgetary environment." (Chuhunov, Kanieva, and Pasichnyi, 2018)

According to the conceptual foundations of the European Charter of Local Self-Government, which Ukraine ratified in July 1997 on its way to European integration, self-governing authorities are one of the most important elements of any democratic system. The main idea of the Charter is the decentralisation of power and the use of the principle of subsidiarity, according to which all issues related to the provision of public services that can be effectively addressed at the local level should be within the competence of local authorities, as they are closest to the population. In order to fulfil the powers entrusted to local selfgovernment bodies, it is envisaged that they will be provided with their own adequate financial resources, as well as the introduction of a budget equalisation procedure to "overcome the consequences of unequal distribution of potential sources of funding and the financial burden they must bear" (European Charter of Local Self-Government, 1985). Thus, capacity is a key characteristic of local self-government and a prerequisite for its financial independence.

Studying the problems of local self-government development, which has been significantly influenced by the decentralisation reform and tax and budget reform, is impossible without studying the financial sustainability of local budgets. The analysis of the financial sustainability of local budgets involves an assessment of the indicators of the formation and use of budgetary funds in order to determine the effectiveness of local self-government.

2. Literature Review

In economic theory, sustainability "characterises the ability of a system to maintain its properties in the face of a changing environment, internal random or purposeful transformations" (Skrypnychenko, 2012). Maintaining sustainability should ensure not only stable functioning but also the development of the system. Researcher Michael Retch (1997) from the University of California considered resilience from the perspective of the economy's ability not only to withstand and prevent, but also to recover quickly from shocks.

The financial sustainability of the budget implies the availability of sufficient financial resources for the timely fulfilment of the powers vested in local authorities, including the rights of citizens to an adequate standard of living, social protection, healthcare, affordable medical care and education guaranteed by the Constitution of Ukraine (The Constitution of Ukraine, 1996). The financial sustainability of the budget reflects the financial independence of local self-government, its ability to withstand external and internal influences and threats, and to maintain the stability of further development. The combination of external negative factors that go beyond the influence of local governments and internal ones significantly increase financial risks and affect the financial sustainability of budgets (Capalbo and Grossi, 2014).

The financial sustainability of local budgets should be viewed as a complex concept that "is characterised by the solvency, balance and independence of local self-government, and is a prerequisite for ensuring the socio-economic development of territories and improving the welfare of the population" (Lysyak and Kushnir, 2014).

implementation Given the active decentralisation reform, the issue of ensuring the financial viability of local authorities is becoming extremely relevant. Kutsenko and Sirenko (2019) note that "the financial capacity of an administrativeterritorial unit (or municipal unit) is its ability to ensure the receipt of sufficient financial resources and the formation of an effective structure of their sources, as well as their qualitative distribution and effective use to overcome destabilisers and achieve stability of the socio-economic development of the unit in the short and long term". In Ukraine, in order to implement the state policy in the field of territorial organisation of power and development of local selfgovernment, the Methodology for the Formation of Capable Territorial Communities was approved in 2015 (The Resolution of the Cabinet of Ministers of Ukraine "On Approval of the Methodology for the Formation of Capable Territorial Communities", 2015). The formation of capable territorial communities (hromadas) is carried out, among other things, taking into account the financial support of the relevant administrative-territorial units, the availability of public services in the relevant areas and the results of a preliminary assessment of their level of capacity based on criteria characterising the main socioeconomic indicators that affect community (hromada) development.

Financial autonomy is the basis of local self-government and implies the availability of adequate financial resources, consistent with the powers granted, which they can independently dispose of. Manuela Söller-Winkler, an international expert of the

U-LEAD with Europe Programme (2021), concluded in her study that local governments do not yet have sufficient financial autonomy, as required by the European Charter of Local Self-Government. Among the main reasons, the author notes the limited base of local taxes from which own revenues are generated and the prevalence of subsidies in official transfers to local budgets.

Currently, there is no single unified approach to assessing the financial sustainability of local budgets. Scholars propose different methodological approaches with a diverse list of indicators. To assess the current and long-term financial sustainability of the budget, Kruk (2011) proposed to use a matrix of parameters, the values of which, depending on the compliance of the calculated coefficients with the normative values, are equal to 0 (non-compliance) or 1 (compliance). Based on the results of the analysis of budgetary independence, security and balance, and on the basis of the obtained parametric estimates, the type of financial sustainability is determined: absolute, normal, unstable, and crisis.

Mikityuk (2013) examines the indicators of financial sustainability of the local budget as defined by the Budget Code of Ukraine, in particular: total local debt, budget reserve fund, local debt service expenditures, budgetary funds' working capital and others, as well as the threshold level of the indicator.

Bondaruk, Bondaruk, and Dubyna (2019) developed a system of indicators in the following groups: financial capacity, financial autonomy, efficiency, and debt burden. To assess the current financial sustainability of budgets, they propose a methodology for calculating an integral indicator using weighting coefficients.

Certain indicators make it possible to assess only one aspect of the object of study, quantitative assessment (resource potential, amount of available resources) or qualitative assessment (efficiency and effectiveness of the use of financial resources). A composite indicator combines individual indicators to form a holistic characteristic and simplify the economic interpretation of research results. Scientists identify several methods of building an integral indicator for a comprehensive analysis of the research object, highlighting their advantages and disadvantages (Hryhoruk and Tkachenko, 2012).

The system of indicators used to assess the financial sustainability of local budgets in different countries differs significantly. This issue was systematised in the study by Lysiak, Kachula, Hrabchuk, Filipova and Kushnir (2020) and ways to improve the assessment methodology in Ukraine were proposed, taking into account international practice. The system of indicators is grouped by four criteria: local budget balance indicators, financial independence indicators, budget efficiency indicators, indicators of

budgetary arrears. They are calculated for 2019, the integral indicator is calculated, and the algorithm for conducting a comprehensive analysis of the financial sustainability of local budgets is specified.

A scientific and methodological approach to a comprehensive assessment of the financial sustainability of local budgets, which includes two levels of analysis (operational and fundamental), was developed by Savastieieva (2021). The author also calculated an integral indicator as a result of the ratio of generalising assessments of operational and fundamental analysis of the level of development of the revenue and expenditure components of local budgets of Ukraine.

3. Methods for Assessing the Financial Sustainability of Local Budgets

Having summarised the proposed methodological approaches to assessing financial sustainability, the article offers a system of indicators grouped according to the following features: balance, financial autonomy, and efficiency of local budgets. The indicators are presented in Table 1, indicating their economic interpretation, calculation algorithm, recommended value and level of significance of individual groups and indicators.

To assess the overall financial sustainability of local budgets, a comprehensive methodological approach was applied by calculating an integral indicator, which is the sum of aggregated standardised indicators for different groups of indicators. The methodology used was that provided in the Methodological Recommendations for Calculating the Level of Economic Security of Ukraine (The Order of the Ministry of Economic Development and Trade of Ukraine "On Approval of Methodological Recommendations for Calculating the Level of Economic Security of Ukraine").

To determine the financial capacity of local budgets, the main trends in community (hromada) development and the effectiveness of local self-government, the dynamics of the following macro-financial indicators were analysed:

- The level of redistribution of GDP through the revenue side of local budgets (excluding intergovernmental transfers), which indicates the degree of their independence;
- the level of redistribution of GDP through the expenditure side of local budgets, which determines the level of powers of local authorities, including the provision of public services;
- share of local budget revenues in the consolidated budget – shows the level of centralisation of financial resources in local budgets;
- the ratio of the basic (reverse) subsidy to the revenues of the general budget fund indicates the level of subsidy.

Table 1
Indicators for assessing the financial sustainability of local budgets

Indicator	Recommended value	Recommended	Group significance	Indicator significance
nucator	(Rec V)	value (Rec V)	level (Lev Sgr)	level (Lev Si)
Indicators of local budget balance (I _B)		ı	0,37	,
Budget coverage ratio	$\mathbf{R}_{BC} = \text{REV} / \text{EX}_{LB}$	1		0,31
Expenditure coverage ratio by intergovernmental transfers	$\mathbf{R}_{\mathrm{EC}} = \mathrm{IT} / \mathrm{EX}_{\mathrm{LB}}$	< 0,3		0,25
Transfer dependency ratio	$\mathbf{R}_{\mathrm{TD}} = \mathrm{IT} / \mathrm{REV}_{\mathrm{LB}}$	< 0,3		0,23
General tax sustainability ratio	$\mathbf{R}_{GTS} = \mathrm{TR} / \mathrm{EX}_{\mathrm{LB}}$	≥ 0,2-0,5		0,21
Indicators of financial autonomy of local budgets (I_{FA})			0,33	
Budget dependency ratio	$\mathbf{R}_{\mathrm{BD}} = \mathrm{IT} / \left(\mathrm{REV}_{\mathrm{LB}+} \mathrm{IT} \right)$	≤ 0,1		0,3
Tax self-sufficiency ratio	$\mathbf{R}_{\mathrm{TSS}} = \mathrm{TR} / \mathrm{REV}_{\mathrm{LB}}$	'≥ 0,3		0,25
Ratio of basic subsidy to intergovernmental transfers	$\mathbf{R}_{\mathrm{BS}} = \mathrm{IT}_{\mathrm{BS}} / \mathrm{IT}$	< 0,6		0,24
Revenue base stability ratio	$\mathbf{R}_{IBS} = (TR + NR) / REV_{LB}$	'≥ 0,6		0,21
Performance indicators of local budgets (IE)			0,30	
Local budget deficit ratio	$\mathbf{R}_{\mathbf{D}} = (\text{REV}_{\text{LB}} - \text{EX}_{\text{LB}}) / \text{EX}_{\text{LB}}$	'≥ 0		0,29
Stability coefficient of the budget revenue side	$\mathbf{R}_{\mathbf{S}} = \mathrm{TR} / \mathrm{IT}$	'≥ 1		0,27
Budget efficiency ratio	$\mathbf{R}_{\mathrm{BE}} = \mathrm{REV} / \mathrm{PS}$	1		0,22
Budgetary provision ratio	$\mathbf{R}_{\mathrm{BP}} = \mathrm{EX}_{\mathrm{LB}} / \mathrm{PS}$	1		0,22
REV_{LB} – local budget revenues (UAH) REV – local budget revenues excluding intergov EX_{LB} – local budget expenditures (UAH) TR – tax revenues (UAH)	ernmental transfers (UAH)			

where:

NR – tax revenues (UAH)

IT – intergovernmental transfers (UAH)

 IT_{BS} – basic subsidy (UAH)

PS – population (persons)

The study carried out a retrospective analysis of indicators for the period 2012-2023, identified the main patterns of development and problems of local budgets. The research focuses on identifying the cause-and-effect relationships between processes and possible ways to fill budgets to increase their financial sustainability.

4. Results of the Assessment of Financial Sustainability of Local Budgets of Ukraine in 2012-2023

A detailed analysis with budget coefficients helps to improve the decision-making process of local governments, as well as to improve the quality of the budget structure and the efficiency of budget funds. In addition, it is an important stage in the development of a financial strategy for the socio-economic development of community (hromada) territories, which affects the events and quality of the formation and execution of local budgets in the future.

The results of the analysis of the main macro-financial indicators that analyse the general trends in the development of local budgets are shown in Figure 1.

The autonomy of local budgets lies in their ability to finance the necessary expenditures at the expense of their own and assigned revenues in order to ensure the sustainable development of the country's regions. Assessing the dynamics of the level of GDP redistribution through the revenue side of local budgets, there is a general positive trend. As a result of the implementation of the decentralisation reform, one can observe an increase in the level of GDP redistribution through local budget expenditures, but the indicator further decreased due to the further implementation of the budget reform and the reduction of certain local budget expenditures. In particular, since 2020, there have been no expenditures related to the implementation of state social protection programmes, and as a result of the healthcare reform, healthcare expenditures have been reduced, with secondary level funding provided through the main administrator, the National Health Service of Ukraine, directly from the state budget. After 2022, the armed aggression against Ukraine had a significant impact on both the state and local budgets. Local governments have cut all non-priority expenditures, which has led to significant changes in the structure of expenditures. The challenges of recent years have also had a significant impact on budget revenues. The sharp decline in the share of local budget revenues in the consolidated budget revenues of Ukraine in 2022-2023 is due to the introduction of privileges, the redirection of personal income tax from military personnel allowances to the state budget, and a significant increase in the state budget's

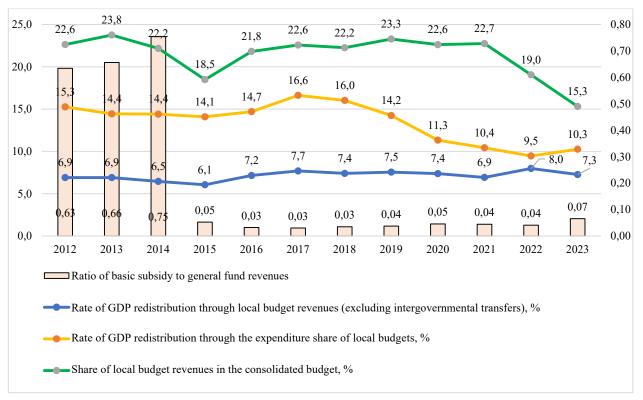


Figure 1. Key macro-financial indicators of local budgets in 2012-2023 *Source: The Ministry of Finance of Ukraine (2024), Open budget (2024)*

receipts from foreign countries and international organisations (Yurchyshena, Syvulska, and Pyslytsia, 2024).

Local budgets are characterised by a reduction in the level of subsidies. This trend is due to the reform of intergovernmental fiscal relations. Since 2015, new types of intergovernmental transfers have been introduced: basic reverse and additional subsidies, subventions, including medical and educational, for investment projects, maintenance of common facilities or elimination of negative consequences of these facilities. The system of budgetary equalisation of local budgets was also changed and a new mechanism of budgetary regulation was introduced, which consists of a system of horizontal equalisation of the tax capacity of territories (Yurchyshena, Syvulska, and Pyslytsia, 2024, p. 109).

The study of the sustainability of local budgets is one of the key stages in assessing the level of financial decentralisation in the country. The results of the calculation of the proposed system of indicators for assessing the financial sustainability of local budgets in 2012-2023 by three groups (balance, financial autonomy, and efficiency of local budgets) are presented in Table 2.

The study shows a positive trend in the group of local budget balance indicators. The value of the budget coverage ratio (R_{BC}) is gradually increasing, with the exception of a decline in 2023 due to the

negative impact of armed aggression against Ukraine. This trend indicates an improvement in the ability of local governments to mobilise financial resources to the budget without the need for additional financial assistance. However, when assessing the financial capacity of local authorities to perform their duties without receiving official transfers in a timely manner and in full, local budgets currently lack the funds to cover expenditures with the available tax and non-tax revenue base. It is advisable to distinguish between the ratio of expenditure coverage by intergovernmental transfers (R_{EC}) and the ratio of transfer dependence (R_{TD}) . The values of these indicators have been gradually decreasing over the study period and are approaching the recommended value, which indicates the effectiveness of the reforms. The overall fiscal sustainability indicator (R_{GTS}) was within the recommended value and gradually increased, reaching a maximum value of 0.79 in 2022. This indicates that about 80% of all budget expenditures in 2022 were covered by tax revenues.

In the group of indicators of the financial autonomy of local budgets, the focus will be on the value of the revenue base sustainability ratio (R_{IBS}), which shows the share of tax and non-tax revenues in budget revenues. During the first years of the study, their share was more than 40%; as the decentralisation reform progressed, the coefficient crossed the recommended value in 2020 with a result of 0.65, and in

Table 2
Estimated coefficients and indicators of financial sustainability of local budgets

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Indicator	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	Rec V
Indicators of local budget balance													
R _{BC}	0,45	0,48	0,45	0,43	0,49	0,46	0,46	0,53	0,65	0,66	0,84	0,71	1
\mathbf{R}_{EC}	0,56	0,53	0,58	0,62	0,56	0,55	0,52	0,46	0,34	0,36	0,28	0,26	< 0,3
\mathbf{R}_{TD}	0,55	0,52	0,56	0,59	0,53	0,54	0,53	0,46	0,34	0,35	0,25	0,27	< 0,3
$\mathbf{R}_{\mathrm{GTS}}$	0,39	0,41	0,39	0,35	0,42	0,41	0,41	0,48	0,60	0,61	0,79	0,65	≥ 0,2-0,5
Indicators of financial autonomy of local budgets													
R_{BD}	0,36	0,34	0,36	0,37	0,35	0,35	0,35	0,32	0,25	0,26	0,20	0,21	≤ 0,1
$\mathbf{R}_{\mathrm{TSS}}$	0,38	0,41	0,38	0,33	0,40	0,40	0,41	0,48	0,61	0,60	0,71	0,67	<i>'</i> ≥ 0,3
\mathbf{R}_{BS}	0,4	0,5	0,5	0,0	0,0	0,0	0,0	0,0	0,1	0,1	0,1	0,2	< 0,6
$\mathbf{R}_{\mathrm{IBS}}$	0,44	0,47	0,43	0,40	0,46	0,45	0,46	0,53	0,65	0,64	0,75	0,72	'≥ 0,6
Performance indicators of local budgets													
$R_{\rm D}$	0,01	0,01	0,03	0,05	0,04	0,01	-0,01	-0,01	-0,01	0,02	0,12	-0,03	'≥ 0
\mathbf{R}_{s}	0,69	0,79	0,67	0,56	0,75	0,74	0,78	1,04	1,78	1,71	2,88	2,45	['] ≥ 1
$\mathbf{R}_{\mathrm{BE}}^{}^{*}}$	2,2	2,3	2,4	2,8	4,0	5,4	6,3	7,2	7,5	9,2	12,8	16,4	1
$\mathbf{R}_{\mathrm{BP}}^{}^{\star}}$	4,9	4,8	5,3	6,6	8,2	11,7	13,5	13,5	11,5	13,8	15,2	23,1	1

Source: The Ministry of Finance of Ukraine (2024), The State Statistics Service of Ukraine (2024)

Note: * - thousand UAH per person;

2022-2023 it reached 0.72-0.75. This trend is confirmed by the analysis of the tax self-sufficiency ratio (R_{TSS}), which is gradually increasing. Tax and non-tax revenues ensure the sustainability of local budget revenues, and local authorities can influence the amount of these revenues. The dynamics of the share of the basic grant (equalisation grant until 2015) in the volume of intergovernmental transfers (R_{BS}) clearly illustrates the impact of the reform of intergovernmental relations described above.

The budget revenue stability ratio (R_s) , as part of the budget efficiency group, shows the ratio of tax revenues to intergovernmental transfers. In 2019, the value of the indicator crossed the recommended level of 1.04, and in 2022-2023, it exceeded it by more than twice. The coefficients of budgetary efficiency (R_{BE}) and budgetary provision (R_{BP}) also show positive changes, with local budget revenues and expenditures per capita increasing significantly. However, it should be noted that the increases in 2022 and 2023 are associated with a significant decline in population. In particular, after the start of the full-scale invasion in February 2022, many citizens were forced to leave for other countries. According to the Institute of Demography and Social Studies, as of January 1, 2023, the population of Ukraine varies between 28 and 34 million people (Ukrinform, 2023).

Summing up the results of the analysis of the calculated coefficients of financial sustainability of local budgets, it is observed that with the development of the reform, there is a multiple improvement of indicators and their location within the recommended value.

The analysis does not allow to fully assess the overall level of financial sustainability of local budgets, so using the values of the significance level of the indicators, the authors calculated sub-indices by partial features for each indicator and groups in general and calculated the integrated indicator of financial sustainability of local budgets (II_{FS}) (Table 3).

Providing a general description of the financial sustainability of local budgets, it should be noted that the dynamics of the integral indicator of budget financial sustainability illustrates a predominantly stable upward trend of more than 3 times from the initial 0.84 in 2012 to 3.12 in 2023 (Figure 2).

The reason for this growth is an increase in own and assigned revenues to local budgets. At the same time, partial dependence on intergovernmental transfers remains a constraining factor for development. The polynomial trend of changes in the level of financial sustainability of local budgets of Ukraine for 2012-2023 with a forecast for 2 periods has an upward trend.

5. Problematic Aspects of Local Budget Functioning and Further Development Prospects

The results of the analysis of the financial sustainability indicators of local budgets of Ukraine show that the crisis in the country caused by the events of 2014, the COVID-19 pandemic and the full-scale invasion of 2022, had a negative impact, but did not shake the sustainability of local budgets. In general, it can be argued that the decentralisation

^{** -} after 2014, the data did not include the temporarily occupied territories of Ukraine.

Table 3
Results of a comprehensive analysis of the financial sustainability of local budgets in Ukraine in 2012-2023

			•				,		0				
Indicator	Lev Sgr / Lev Si	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
\mathbf{R}_{BC}	0,31	0,14	0,15	0,14	0,13	0,15	0,14	0,14	0,16	0,20	0,21	0,26	0,22
R _{EC}	0,25	0,14	0,13	0,14	0,16	0,14	0,14	0,13	0,11	0,08	0,09	0,07	0,07
\mathbf{R}_{TD}	0,23	0,13	0,12	0,13	0,14	0,12	0,12	0,12	0,11	0,08	0,08	0,06	0,06
R_{GTS}	0,21	0,08	0,09	0,08	0,07	0,09	0,09	0,09	0,10	0,13	0,13	0,17	0,14
I_{B}	0,37	0,49	0,49	0,49	0,50	0,50	0,49	0,48	0,49	0,49	0,50	0,55	0,48
R_{BD}	0,3	0,11	0,10	0,11	0,11	0,10	0,11	0,10	0,10	0,08	0,08	0,06	0,06
$\mathbf{R}_{\mathrm{TSS}}$	0,25	0,10	0,10	0,09	0,08	0,10	0,10	0,10	0,12	0,15	0,15	0,18	0,17
R _{BS}	0,24	0,10	0,12	0,11	0,01	0,01	0,01	0,01	0,01	0,02	0,02	0,03	0,04
R_{IBS}	0,21	0,09	0,10	0,09	0,08	0,10	0,09	0,10	0,11	0,14	0,14	0,16	0,15
\mathbf{I}_{FA}	0,33	0,39	0,42	0,40	0,29	0,31	0,31	0,31	0,34	0,38	0,38	0,42	0,42
R_{D}	0,29	0,004	0,002	0,01	0,01	0,01	0,004	-0,004	-0,003	-0,004	0,01	0,03	-0,01
\mathbf{R}_{s}	0,27	0,19	0,21	0,18	0,15	0,20	0,20	0,21	0,28	0,48	0,46	0,78	0,66
R _{BE}	0,22	0,49	0,51	0,52	0,62	0,88	1,19	1,38	1,58	1,65	2,02	2,83	3,60
R_{BP}	0,22	1,07	1,06	1,16	1,44	1,81	2,57	2,98	2,97	2,53	3,04	3,35	5,09
I_{E}	0,3	1,75	1,79	1,86	2,23	2,91	3,97	4,56	4,83	4,65	5,53	6,99	9,35
II_{FS}		0,84	0,86	0,88	0,95	1,16	1,47	1,65	1,74	1,70	1,97	2,44	3,12

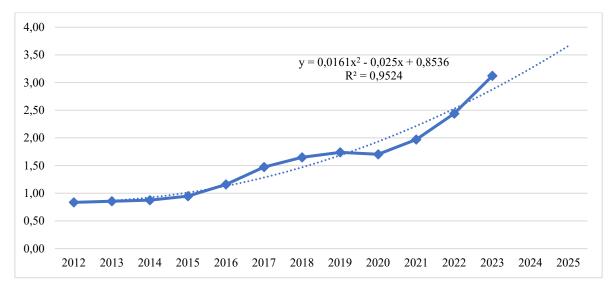


Figure 2. Dynamics and polynomial trend of the integral indicator of financial sustainability of local budgets in Ukraine

reform launched in Ukraine in 2014 and the subsequent reform of budgetary relations have fully justified themselves, and this allows local budgets to remain financially stable in today's difficult realities.

Financial decentralisation, as one of the key elements of the local government reform in Ukraine, is primarily aimed at ensuring the efficiency and transparency of local governance, strengthening the economic base of local communities (hromadas) and improving the quality of public services. The main directions of the reform are as follows: providing new sources of revenue and expenditure powers to local authorities, including the right to independently determine the use of budget funds; introducing

new mechanisms for financial equalisation of local community (hromada) budgets; and granting the right to make external borrowings to replenish the budget. By transferring financial resources to local budgets, local authorities are better able to take into account the needs of their citizens and ensure their implementation.

However, certain problems remain at the local level that complicate the work of local authorities and need to be addressed. The assessment of financial sustainability indicators showed an insufficient amount of own and assigned revenues to cover the necessary budget expenditures and community (hromada) development, which once again confirms the need to expand the base of revenue sources, as well as the

existing partial dependence on intergovernmental transfers. Thus, the decisions of public authorities have a significant impact on the development of territories.

Tax revenues are the main source of local budget revenues (Slavkova, 2024). However, it is advisable to introduce measures to increase the role of local taxes and fees: expanding their list, as the abolition of some taxes and fees as a result of the budget reform was inappropriate, for example, the advertising tax and market fee provided quite significant revenues to the budgets of territorial communities (hromadas); expanding the powers to set local taxes and fees. Greater attention should also be paid to stimulating the development of entrepreneurship by providing benefits and preferences, attracting investment, which will have a positive impact on employment growth and increase tax revenues.

Given the successful implementation of the decentralisation reform in Ukraine, it is advisable to develop a system of indicators to assess the financial sustainability of local budgets and to consolidate it by adopting a relevant regulatory document. This will help to improve the process of monitoring the functioning of local budgets, identify not only real but also potential risks and threats in order to avoid them and improve the efficiency of local government.

Significant attention should be paid to the issue of formulating development strategies for individual regions and territorial communities (hromadas), which should be consistent with each other and complement the overall development strategy of the country. The State Strategy for Regional Development for 2021-2027 states that there are currently no significant changes in strengthening partnerships between regions, and that there are still significant interand intra-regional disparities in terms of economic development and quality of life. The primary objective of the regional policy is to "accelerate economic growth in the regions, increase their competitiveness through the effective use of internal potential, create new jobs, improve employment, and create conditions for labour migrants to return home" (The Resolution of the Cabinet of Ministers of Ukraine "State Strategy for Regional Development for 2021-2027", 2020).

6. Conclusions

Ensuring the financial sustainability of local budgets not only allows local authorities to function stably, withstand negative influences and shocks, but also to develop steadily. Ukraine has implemented a number of reforms aimed at increasing the autonomy of local governments and providing them with sufficient financial resources to provide affordable and high-quality public services to the population.

As the study has shown, there are many methodological approaches to assessing the financial sustainability of local budgets, and scholars propose different systems of indicators, but there is currently no single unified approach. The authors consider it expedient to develop a unified methodology for a comprehensive assessment of the financial sustainability of the budget with a list of indicators, the study of which will not only help to examine all aspects of the object's functioning, but also identify potential risks and, on this basis, make informed management decisions for the further development of the community (hromada), region and country as a whole. This methodology, as well as the developed algorithm for conducting a comprehensive analysis, will help in the practical implementation of continuous monitoring of the financial sustainability of local budgets by local authorities, preventing the emergence of negative manifestations or timely resolving problem situations that have already arisen.

Undoubtedly, the assessment of the financial sustainability of local budgets is essential for determining the effectiveness of local government. Having studied the impact of the reforms implemented in Ukraine and external threats on the balance, autonomy, and efficiency of local budgets, it can be argued that the financial basis of local self-government remains quite stable. Despite the challenging operating environment of recent years, local authorities have proven their ability to quickly adapt to changes. The key indicators of financial sustainability of local budgets are within or close to the recommended values. However, own and assigned revenues of local budgets are not enough to finance the necessary expenditures. This issue needs to be resolved, given the need to restore and rebuild Ukraine caused by the armed aggression. There is also the issue of further regulating the issue of financial equalisation between budgets to build capable and effective communities (hromadas).

It is necessary to continue the reform process to overcome the existing problems and contradictions, which will help to increase the financial sustainability of local budgets and provide new opportunities for the implementation of the regional development strategy of Ukraine.

References:

Bondaruk, T., Bondaruk, I., & Dubyna, M. (2019). Methodical set of instruments for estimating financial stability of local budgets in Ukraine. *The world of finance*, Vol. 2(59), p. 60–72. Available at: http://sf.wunu.edu.ua/index.php/sf/article/view/1226

Capalbo, E., & Grossi, G. (2014). Assessing the influence of socioeconomic drivers on Italian municipal financial destabilization. *Public Money & Management*, Vol. 34(2), p. 107–114. DOI: https://doi.org/10.1080/09540962.2 014.887518

Chuhunov, I. Ya., Kanieva, T. V., & Pasichnyi, M. D. (2018). Fiscal policy in the system of regulation of the economy. Kyiv: Hlobus-Press.

The Constitution of Ukraine, adopted at the 5th session of the Verkhovna Rada of Ukraine on June 28, 1996. Available at: https://zakon.rada.gov.ua/laws/show/254%D0%BA/96-%D0%B2%D1%80#Text

European Charter of Local Self-Government, adopted on October 15, 1985. Available at: https://zakon.rada.gov.ua/laws/show/994 036?lang=en#Text

Hryhoruk, P. M., & Tkachenko, I. S. (2012). Methods of building an integral indicator. *Business Inform*, Vol. 4, p. 34–38. Available at: https://www.business-inform.net/export_pdf/business-inform-2012-4_0-pages-34_38.pdf

Kruk, O. M. (2011). Qualitative assessment of the financial sustainability of local government. *Visnyk of Donbass State Engineering Academy*, Vol. 3(24), p. 133–137. Available at: http://www.dgma.donetsk.ua/science_public/ddma/2011-3-24/article/11KENSLB.pdf

Kutsenko, T., & Sirenko, Ya. (2019). Ensuring the financial capacity of territorial communities as a priority of decentralization of governance. Kyiv: KNEU. Available at: https://core.ac.uk/download/pdf/197277715.pdf

Lysiak, L., Kachula, S., Hrabchuk, O., Filipova, M., & Kushnir, A. (2020). Assessment of financial sustainability of the local budgets: case of Ukraine. *Public and Municipal Finance*, Vol. 9(1), p. 48–59. DOI: http://dx.doi.org/10.21511/pmf.09(1).2020.05

Lysyak, L., & Kushnir, A. (2014). Financial stability of local budgets: theoretical aspects. *Young Scientist*, Vol. 1(65). DOI: https://doi.org/10.32839/2304-5809/2019-1-65-109

Mikityuk, I. (2013) Financial stability and safety of the local budget. *Visnyk of Kyiv National University of Trade and Economics*, Vol. 1, p. 87–96. Available at: http://visnik.knute.edu.ua/files/2013/01/8.pdf

The Ministry of Finance of Ukraine (2024). *Execution of Local Budget Revenues*. Available at: https://mof.gov.ua/en/vykonannia-dokhodiv-mistsevykh-biudzhetiv

The Ministry of Finance of Ukraine (2024). Statistical collections of the Ministry of Finance "Budget of Ukraine". Available at: https://mof.gov.ua/uk/statistichnij-zbirnik

Open budget (2024). Budget. Available at: https://openbudget.gov.ua/?month=12&year=2019&budgetType=CONSOLIDATED

The Order of the Ministry of Economic Development and Trade of Ukraine "On Approval of Methodological Recommendations for Calculating the Level of Economic Security of Ukraine" of October 29, 2013, № 1277. Available at: https://zakon.rada.gov.ua/rada/show/v1277731-13#Text

The Resolution of the Cabinet of Ministers of Ukraine "On Approval of the Methodology for the Formation of Capable Territorial Communities" of April 8, 2015, № 214. Available at: https://zakon.rada.gov.ua/laws/show/214-2015-%D0%BF#Text

The Resolution of the Cabinet of Ministers of Ukraine "State Strategy for Regional Development for 2021-2027" of August 5, 2020, N^0 695. Available at: https://zakon.rada.gov.ua/laws/show/695-2020-%D0%BF#n11

Retch, M. (1997). Social structure of accumulation theory: retrospect and prospect. Sage Journals. Review of Radical Political Economics. DOI: https://doi.org/10.1177/048661349702900301

Savastieieva, O. (2021). Assessment of Financial Sustainability of Local Budgets of Ukraine in the Context of Transformation of Intergovernmental Relations. *Problems and prospects of economics and management*, Vol. 4(20), p. 403–411. Available at: http://ppeu.stu.cn.ua/article/view/204779

Skrypnychenko, M. I. (2012). Factors of macroeconomic instability in the system of economic development models. Kyiv: Institute for Economics and Forecasting National Academy of Sciences of Ukraine.

Slavkova, A. A. (2024). Tax revenues in the total revenues of local budgets of Ukraine and their fiscal potential. *Business Inform*, Vol. 2, p. 210–220. DOI: https://doi.org/10.32983/2222-4459-2024-2-210-220

 ${\it S\"{o}ller-Winkler, M. (2021)}. \ Financial \ autonomy: \ at \ the \ heart \ of \ local \ government. \ {\it Decentralization.} \ Available \ at: \ https://decentralization.ua/en/news/13610$

The State Statistics Service of Ukraine (2024). *Demographic and social statistics*. Available at: https://www.ukrstat.gov.ua Ukrinform (2023). *The population of Ukraine varies from 28 to 34 million – demographers*. Available at: https://www.ukrinform.ua/rubric-society/3692466-ciselnist-naselenna-ukraini-variuetsa-vid-28-do-34-miljoniv-demografi. html#google_vignette

Yurchyshena, I., Syvulska, N., & Pyslytsia, A. (2024). Problems and prospects of forming budget revenues in Ukraine in the context of decentralization. *Modeling the development of the economic systems*, Vol. 2, p. 107–115. DOI: https://doi.org/10.31891/mdes/2024-12-14

Buriachenko, A., Levchenko, K., Spasiv, N., Osipova, A. (2022). Fiscal decentralization of the Visegrad group countries as a key factor of development. *Acta Innovations*, Vol. 45, pp. 31–44. DOI: https://doi.org/10.32933/ActaInnovations.45.3

Buriachenko, A., & Paientko, T. (2022). Developing an Algorithm for the Management of Local Government Expenditures. In: , et al. ICTERI 2021 Workshops. ICTERI 2021. *Communications in Computer and Information Science*, Vol. 1635. Springer, Cham. DOI: https://doi.org/10.1007/978-3-031-14841-5_13

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