THE NISPACEE JOURNAL OF PUBLIC ADMINISTRATION AND POLICY, VOL. XIX, NO. 1, SUMMER 2026

10.2478/nispa-2026-0005

Local Budget Transparency in Belarus

Yuri Krivorotko[1], Dmitry Sokol[2]

Abstract:

World experience demonstrates that public participation in the budget process and transparency in the public sector are required prerequisites for the State's proper economic strategy. Financial openness, in its broadest sense, is now a crucial component of sound fiscal and monetary policy. In a narrower sense, it is more often associated with the transparency of the budget process, particularly at the local level. Financial transparency helps to ensure the efficient collection and allocation of public resources. It increases government accountability, builds citizen trust, and eliminates potential for corruption. Research on fiscal transparency in Belarus shows a noticeable gap compared to other post-Soviet countries, linked to the significant centralisation of Belarusian governance. The study is based on the main theoretical principles of principal-agent theory, as well as on the theory and practice of fiscal transparency. The purpose of this study is to assess the online openness and transparency of local budgets in Belarus at the basic administrative-territorial unit (ATU) level. The developed methodology involves the use of two criteria: (1) the level of transparency of local budgets and (2) an assessment of the authority's efforts in ensuring transparency of local budgets. Based on expert judgments of the significance and actual availability of this information, we conducted an integrated assessment of the information content of local government websites in 2020. As a result, we calculated the Online Local Budget Index of Transparency. In addition, we evaluate which factors (financial, geographical, and demographic) affect transparency levels. We found that the degree of transparency

1 Masaryk University, Brno, Czech Republic.
2 Georgia State University, Atlanta, USA.

is not sufficiently correlated with local budget size, revenue, area, or population.

Keywords:
budget openness, budget transparency, fiscal decentralisation, local budget, open budget, Online Local Budget Index of Transparency – OLBIT

JEL Classification: H61, H72, H83

1. Introduction

Fiscal transparency is a critical element of effective public financial management, helping build market confidence and underpinning economic sustainability. It also fosters greater government accountability by providing citizens with a window into government budgets, helping them hold their leadership accountable and facilitating better-informed public debate (Alt, 2019). It is no coincidence that international financial organisations base borrowing capacity and other forms of financial assistance on a country's level of financial openness and transparency.

Budget openness and transparency result from the interaction among economic agents who demand and provide budget information and principals. These agents who demand information include members of relevant communities, borrowers, investors and civil society organisations. On the supply side, stakeholders include local politicians, local government bodies, and public utilities that work with budget funds. Each of the above-mentioned agents has its own motivation for requesting the disclosure of budget information or for concealing it. The demand side appears to be much less organised here, while the supply side seems unwilling to disclose the relevant information. National government regulations on transparency, therefore, appear to be very important for the effective implementation of the principle of transparency at the local level of government.

Budget transparency and openness are especially critical in transitional economies, which lack a long history of public administration compatible with market-economy traditions and advanced democracies. Low transparency can result in a loss of public control over appointed officials and elected politicians, misuse of public funds, and unproductive spending. As a result, achieving a suitable level of openness is one of the most significant aims for countries overhauling their public administration and finance to meet modern governance requirements.

In recent years, both civil society groups and the Belarusian government have begun paying close attention to openness and transparency. Officials have recognised that financial transparency is one of the criteria for dependable and effective collaboration with international finance institutions in the realisation of major socioeconomic initiatives, prompting researchers to investigate financial openness and transparency in both non-governmental and government institutions. SYMPA, a non-governmental group, undertook the first pilot initiative study (not an official one) on financial openness and transparency in 2017, with World Bank financing. The findings of this investigation revealed that Belarus's rankings were relatively low. Belarus has generated and published 5 of the 8 primary documents reviewed by the 'Open Budget Survey'. According to the data received, Belarus' rating was 0-20 points, indicating that the public supply of budget information remains insufficient. The interest shown by government agencies in this topic prompted the Ministry of Finance to request its inclusion in the official rating, the 'Open Budget Survey', which was scheduled to take place in 2021 (Krivorotko & Sokol, 2021). However, due to the COVID-19 pandemic, it did not take place.

At the same time, the study conducted by the NGO SIMPA focused exclusively on the national level, without addressing the finances of local authorities, which account for about half of the Republic of Belarus's consolidated budget. The current situation makes research into trends in the transparency of Belarusian local budgets increasingly important, especially given the close link between local budget expenditures and communities' real needs. At the same time, the existing study focuses solely on national public finances and budgeting, with no mention of local government finances, which account for about half of the Republic of Belarus' entire consolidated budget.

The main goal of this study is to assess the online openness and transparency of local budgets in Belarus at the basic level within the framework of district budgets (118 units) and budgets of cities under regional subordination (10 units), which are recognised as administrative-territorial units (ATU) according to the existing administrative-territorial division. We do not use the terms openness and transparency interchangeably. Not all open material is genuinely accessible to people for comprehension and interpretation—consequently, not all openness results in the processes being observed as transparent. No such evaluations have ever been conducted in Belarus; therefore, this is a pioneering study. The investigation is based on two research questions as follows:

RQ1: What is the local budget transparency in Belarus?

RQ2. Which factors affect the transparency level?

The article begins with a description of the relevance of the local budget. It then details the development of a methodological framework for analysing online budget transparency. Subsequent sections present the analysis of budget information, the resultant overall rating, and an assessment of governmental disclosure efforts. The paper then tests hypotheses to determine the factors influencing transparency and concludes with evidence-based recommendations for enhancing budgetary practices in Belarus.

2. A short literature review

Over the past decade, research on fiscal transparency in European countries has been actively developing and has even spread to China (Hu et al., 2020) and South Africa (Fourie, 2019). The research in Europe has covered countries such as Croatia, Spain, Portugal, the Czech Republic, Macedonia, Lithuania, Ukraine, Romania, Germany, and the UK. Researchers studying budget transparency in these countries used a wide variety of methods to assess transparency and the factors influencing it, ranging from observation, interviews, and surveys to the construction of transparency indices and models.

Among Central and Eastern European (CEE) countries, active researches were conducted in Croatia by scientists from the Croatian Institute of Public Finance, led by Ott. One of the important studies on budget transparency was conducted in 2015-2016 (Ott et al., 2018), which used a unique panel database covering all 128 cities and 428 municipalities to examine differences over time using regression analysis. Later, the Institute began conducting ongoing monitoring of budget transparency. Between November 2016 and March 2017, Ott's research team calculated the overall average level of transparency of Croatian local government budgets assessed, measured by the number of budget documents on their websites. The study showed significant progress in budget transparency, while at the same time rightly noting a lack of transparency in 11 cities and 89 municipalities. Among the studies by the Croatian Institute of Public Finance, an article, 'The effects of budget transparency on the budget balances and expenditures of Croatian local governments', prepared by M. Bronić, is also worth mentioning. The article. explores the impact of budget transparency on fiscal management within Croatian local governments. The research aims to determine whether increased budget transparency leads to better control over public finances, particularly during pre-election periods. The study examines how the digital accessibility of five key budget documents affected spending and budget balances across all 556 local governments in Croatia between 2014 and 2019. The findings suggest that increased budget transparency can aid in more effective fiscal deficit management and expenditure control. This transparency is critical for ensuring that local governments maintain fiscal discipline and avoid opportunistic financial behaviours (Bronić et al., 2022).

Among Spanish scholars, research on budget transparency has been conducted by Caamaño-Alegre, Lago-Peñas, Reyes-Santias, and Santiago-Boubeta (Caamaño-Alegre et al., 2012). In their article, 'Budget Transparency in Local Governments: An Empirical Analysis', they seek to shed further light on the determinants of budget transparency in Spain. Based on a questionnaire survey of 33 local authorities in the Galicia region, the authors used the analysis results to test the questionnaire's internal consistency and several hypotheses concerning the determinants of budget transparency. The most and least transparent areas of budget policy were identified. Using a transparency index and econometric models, the authors assess how political, economic, and institutional variables (e.g., political competition, fiscal pressure, population size) affect budget openness. The authors considered compliance with public procurement rules and the conduct of audits to be the most transparent, and citizen participation in budget preparation, periodic reporting on budget expenditures, and analysis of spending programs' effectiveness prior to their approval to be the least transparent. The results show that larger municipalities and those under greater fiscal pressure tend to be more transparent, while political ideology has a mixed effect. Overall, the outcomes were consistent with the idea that governments are more likely to increase transparency when they inherit a heavy fiscal burden (high debt) and adopt prudent spending policies (low deficits).

Other Spanish researchers analysed the impact of transparency on fiscal indicators: Ríos, Guillamon, Benito, and Bastia. They created a sample of the 100 largest Spanish municipalities for 2008, 2009, 2010, 2012, and 2014 and used 11 variable indicators for the assessment. The results showed that the level of budget transparency affects budget forecast deviations in tax revenues and current expenditures. On the one hand, less transparent municipalities overestimate their revenues, which allows them to provide more public services without immediately raising taxes. On the other hand, these local authorities, aware of their revenue overestimation, may spend less than budgeted. More transparent municipalities, meanwhile, appear to be more cautious in their revenue estimates, underestimating their revenue, which means they can spend more than forecast. Ríos et al. (2018) explore the relationship between budget transparency and the accuracy of budget forecasts in municipal governments. The article's overall message emphasises the critical role of transparency in producing more accurate and trustworthy budget projections, which are essential for efficient municipal governance and financial management (Ríos et al., 2018).

In Portugal, Tavares and Da Cruz (2017) analyse factors influencing the transparency of local government websites using a political market framework, which considers demand-side (citizens' expectations) and supply-side (government incentives) factors. Analysing Portuguese municipalities, they find that political competition, fiscal pressure, and education levels drive transparency, while left-wing governments and larger populations also positively impact website openness. The study highlights how both citizen demands and political incentives shape e-government transparency (Tavares & Da Cruz, 2017).

In the Czech Republic, a study on transparency in the budgets of Prague district municipalities was conducted by Sedmihradská in 2014. The study covered 22 Prague districts. It was based on research into legislation on the disclosure of budget information for local authorities in the Czech Republic, as well as on requirements for the publication of individual budget documents: draft budget, budget forecast, approved budget, amended budget, year-end report, and audit report. Based on a questionnaire survey, three evaluation criteria and eight variable indicators were used. The results showed that the legislative interpretation of budget transparency was rather vague and fragmented. A positive conclusion in the assessment of transparency was that districts comply with the disclosure requirements set out in the Budget Rules, but often do not comply with those set out in the legislation on freedom of information. An analysis and comparison of information disclosure practices across the Prague districts studied showed that a commitment to transparency, expressed through a political statement, does not affect the overall assessment. However, it is positively correlated with the preparation of descriptive materials accompanying both the draft budget and the draft annual report. At the same time, the district's size plays only a limited role (Sedmihradská, 2015). Later, Sedmihradská published a new article, 'Budget transparency innovation in the Czech local government', in which she examined budget transparency innovation and its impact on voluntary disclosure of budget information. The study was based on a survey of budget researchers in 72 former Czech district cities. The main contribution of the study was that it drew public attention to where, for the first time, publicly available financial information and best practice standards were presented (Sedmihradská, 2019).

Research on budget transparency in Macedonia has been conducted by Andonova et al., which reveals that Macedonian municipalities face significant challenges in achieving adequate levels of budget transparency (Andonova et al., 2017). These challenges include inconsistent implementation of transparency laws, limited public access to budgetary information, and insufficient mechanisms for holding local governments accountable. Although legal frameworks exist to encourage transparency, the article notes that they are often not enforced effectively, resulting in a lack of comprehensive, easily accessible budget information for citizens. This opacity in budgetary processes makes it difficult for the public to monitor and participate effectively in local governance.

Birškytė's article 'Determinants of Budget Transparency in Lithuanian Municipalities' examines the factors influencing budget transparency in Lithuania. The article aims to identify evidence of Lithuanian subnational governments' use of new technologies to disclose budget information in a timely, systematic, and comprehensive manner. The article attempts to develop a budget transparency index for each municipality, based on criteria from theory and previous studies. An empirical model is then created to identify factors influencing budget transparency. make the budget process more transparent compared to other municipalities. The results show that the percentage of the population living in rural areas and turnout in local elections are negatively associated with budget transparency.

In contrast, the level of debt is positively associated with transparency. The results also provide evidence that per capita income and the level of intergovernmental grants are negatively associated with budget transparency. The study contributes to the existing literature by adding Lithuania to the relatively small set of countries that have developed budget transparency indices for subnational governments (Birškytė, 2018).

In Romania, Pintea (Pintea, 2014) conducted a study on budget transparency. In her article, 'Transparency of local budgets in the Central region of Romania', she used an approach to assess transparency through the availability of budget information on the websites of six urban districts in the Central region of Romania. Six indicators were used to assess the accessibility of budget information on the websites of these administrative-territorial units: the availability of the draft budget, the initially approved budget, the revised budget, budget execution accounts, achieved indicators, and financial statements. These indicators were aligned with the requirements of the OBI index. In his study, the author concluded that it is necessary to increase the transparency of district city budgets, thereby increasing the accountability of elected officials, ensuring more equitable public spending, improving the quality of public debate, and providing stable conditions for investment decisions. At the same time, it is recommended to prepare and publish: a budget for citizens, a preliminary budget report, an annual average review and the completeness of budget proposals from the executive branch, intra-year reports, and auditor reports.

Researchers from Ukraine have also contributed to studies on budget transparency. Slukhai et al. filled a gap in research on public sector transparency at the basic administrative level by assessing budget transparency in the newly formed administrative-territorial units (ATUs) of four regions of Ukraine using a simplified methodology that included 11 indicators (Slukhai et al., 2019, 2019a).

In Germany, Haustein and Lorson (2022) wrote an article titled 'Transparency of Local Government Financial Statements: Analysing Citizens' Perceptions', which focused on financial reporting transparency. The research presents a sample of 30 German citizens with different socio-demographic characteristics. The authors note that local authorities publish financial reports to inform citizens about the financial situation of local governments. However, are local government financial reports appropriate mechanisms for public accountability, and are citizens able to understand the information presented in financial reports? The results of the study show that, despite citizens' demands for transparency of financial information, they find it difficult to understand financial reports. Citizens appear overwhelmed by information and are calling for the delegation of tasks or the simplification of reporting formats.

Regarding the UK, Lapsley and (Lapsley & Ríos, 2015) also contributed to the article 'Making sense of government budgeting: an internal transparency perspective', which aimed to examine the internal transparency of public budgeting in Scotland. The authors used mixed methods to study transparency: document analysis, observation, and elite interviews. The study used a new 'lens' with three levels of transparency, focusing on the emerging field of internal transparency in public budgeting. The research results showed that the idea of transparency in government extends beyond mere openness and that politicians can suppress and limit transparency through political will and action.

It is possible to summarise the literature review in the field of fiscal transparency by pointing out that the research methodology concentrated on two successive steps: (1) evaluating the transparency measure using the index; (2) developing a factor model that presents different institutional, political, economic, financial, and social factors. We attempted to follow this path in our own investigation on the openness and transparency of local finances in Belarus.

3. Methodology

Our approach to evaluating the transparency of budget systems is likewise based on the transparency score from the International Budget Partnership's Open Budget Survey (OBS) (IBP, 2024). We tried to make assessments of following issues: (I) identification of key budget documents, (II) assessment of the draft budget and related information, (III) evaluation of transparency at all four stages of the budget process, (IV) assessment of influence of the legislative power to the executive during the budget process, (V) assessment of public participation in the budget process. We evaluated not only budget-related data but also factors related to local territory development, including borrowing policies, investment project implementation, and the availability of programs for the territory's socioeconomic development.

As a result, we have identified 16 most important blocks of information (estimated indicators), that are sufficient to ensure an appropriate level of transparency of the local budget on official websites of local authorities: 1) Section 'Economics'; 2) Separate Section 'Budget (and/or Finance)'; 3) Programme of Socioeconomic Development of the Territory; 4) Project Budget; 5) Citizens Budget; 6) Minutes of Public Hearings on Budgeting; 7) Adopted Decisions Approving Budget for the Current Year; 8) Decisions on Approval of the Report on the Annual Budget Execution; 9) Quarterly, (Semi-Annual) Reports on the Budget Execution; 10) Statement on Borrowing Policy; 11) Information About Current Borrowings and Repayments; 12) Information 'Investment Atlas' ('Investment Passport of District'); 13) Information on the Implementation of Current Investment Projects; 14) Report on Execution of Budget Programmes; 15) Feedback Interface (ability to write a query or appeal); 16) Articles (Informational Messages) on Local Budget in Local Media.

Our initial analysis led to the development of a two-dimensional model for assessing local budget transparency, which we call the OLBIT model. This framework evaluates openness based on two key criteria:

a) The prevalence of specific financial data on official websites, measured by its frequency of publication (How commonly various types of financial information are published on local websites?).
b) The perceived value of that data, as ranked by experts in public finance (How important experts deem each type of information to be?).

We revealed the openness and transparency of the local budget process through our direct initiative survey of all 128 local authorities' websites of the basic territorial level of Belarus from November 20, 2019, to February 3, 2020 (Table 1).

Table 1:

Belarusian local authorities in administrative territorial units (01.01.2025)(National Cadastral Agency, 2025)

Levels of local authorities	**Kind of ATU**	**Local councils**	**Executive body**
REGIONAL	Oblast	6	Executive committee
	Minsk	1	Executive committee
	Total	7	Regional Councils
BASIC	District	118	Executive committee
	City of oblast submission	10	Executive committee
	Total	128	Basic Councils
PRIMARY	City of rayon submission	14	Executive committee
	Settlement	8	Executive committee
	Rural council	1127	Executive committee
	Total	***1149***	Primary Councils
	Totally	**1284**	Councils

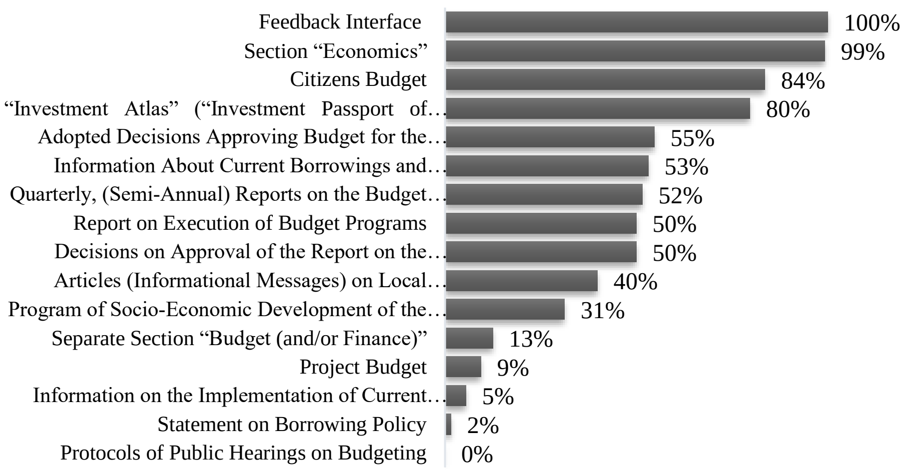
Source: Authors' own based on national statistics data (National Cadastral Agency, 2025)

Table 1 shows the composition of base-level budgets (rayon and city local budgets, 128 units in total) on which the study will be evaluated. However, a comprehensive research on local budget openness and transparency, encompassing 1127 lowest rural budgets, will require additional resources, effort, and significant funding, with international assistance [R2].

We assessed, on a case-by-case basis, whether to include the section in the site's structure and whether any content was specifically pertinent to this subject. The local government's website received a score of 1 for having pertinent information and 0 for not having it. Therefore, each indicator compliance requirement may range from 0 to 16 (Figure 1).

Figure 1:

Information structure content of the Republic of Belarus's ATUs' official websites, %



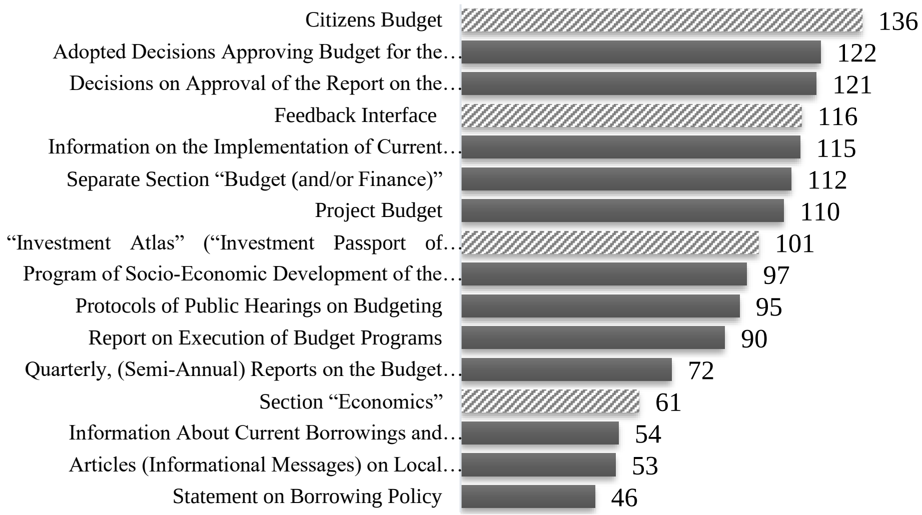
Source: Authors' own, 2025

The data for weighing were collected using the expert method. We contacted 11 experts representing academics, NGOs, and government personnel. They have evaluated all 16 information indicators using a 10-point scale based on how important budget information is to the public (see Appendix table A.1). We highlighted the indicators that are best represented on district administration websites. Experts believe that the 'Citizens Budget' is the most significant factor in ensuring budget openness. Experts ranked the authorised yearly budget and its execution report second in importance, with only half of the instances being given on-site. Experts also consider the inclusion of a feedback interface significant. However, the following major indicators: information regarding the implementation of investment projects, the 'Budget and Finance' section, and the draft budget are all underrepresented on the sites by 5%, 9%, and 13%, respectively.

We included information blocks on the breadth and applicability of the budget data on the websites in addition to this section of the evaluation. There is the depth of budget data submitted on the site in time ranges: 1 year, 1-2 years, 1-3 years, 1-4 years and more; the relevance of information on the district's budget (latest publication): up to 1 month, for periods of 2-3 months, 3-6 months, and more than 6 months.

Figure 2:

Budget transparency indicators ranked by the sum of expert assessment points



Source: Authors' own (see Tables 2, 3), 2025

The experts assigned points to the parameters based on their significance. The expert assigns 10 points to the factor with the highest rating. If the expert considers many criteria to be equivalent, they all receive the same score. We reformulated the questionnaire table because it contained linked ranks (identical scores) across all expert assessments. We re-formed the ranks without affecting the experts' views, thereby maintaining the corresponding ratios (more, less, or equal) between the ranks. Reformulating the questionnaire data created a new rating matrix (Figure 2 and Table 2).

Table 2:

Expert rankings of importance and weight of local budget openness and transparency metrics

Indicators, (Ki)	Average ranked score, (Bi)	Weight indicators, (Yi)
Section ‘‘Economics’	5.50	4.0%
Separate Section ‘Budget (and/or Finance)’	10.18	7.5%
Program of Socio-Economic Development of the Territory	8.82	6.5%
Project Budget	9.95	7.3%
Citizens Budget	12.36	9.1%
Protocols of Public Hearings on Budgeting	8.59	6.3%
Adopted Decisions Approving Budget for the Current Year	11.09	8.2%
Decisions on Approval of the Report on the Annual Budget Execution	10.95	8.1%
Quarterly, (Semi-Annual) Reports on the Budget Execution	6.50	4.8%
Statement on Borrowing Policy	4.14	3.0%
Information About Current Borrowings and Repayments	4.86	3.6%
‘Investment Atlas’ (‘Investment Passport of District’)	9.18	6.8%
Information on the Implementation of Current Investment Projects	10.45	7.7%
Report on the Execution of Budget Programmes	8.14	6.0%
Feedback Interface	10.50	7.7%
Articles (Informational Messages) on Local Budget in Local Media	4.77	3.5%

Source: Authors’ own, 2025

The extent of local authorities’ efforts to achieve fiscal transparency remains an open question in the OLBIT transparency assessment. To achieve this, we calibrated the actual OLBIT index against the weighted information criteria values observed by a given administration. In other words, the administration has put out more effort into the ‘Citizens Budget’ (9.1%) than it has in publishing the ‘Statement on Borrowing Policy’ (3%).

This indicator, or the authorities’ effort coefficient (Cae), unlike the experts’ point-based assessment, is based on relative values and indicates the level of information density (above or below typical values) of local government websites on local finance issues.

$$\text{Cae} = \frac{\text{Share of positive variables ATU (municipality)}}{\text{Share of positive average variables for all the ATUs (all 128 municipalities)}} \quad (1)$$

We measure a local authority’s efforts by multiplying the positive information criteria values by the expert evaluation's weighted value for this indicator. The effort score increases with the significance of the information criteria met. In addition, the effort rating is a relative average of all ATUs' effort ratings. This method raises the prospect of a political strategy to select indicators that will improve the ATU's transparency rating while, on the other hand, saving money by avoiding less important criteria.

The authorities' efforts to ensure openness and transparency are sufficient if the percentage of positive values for the criterion in a specific ATU is greater than the percentage of all positive criteria across all ATUs; otherwise, they are insufficient. To put it simply, the authorities' coefficient of effort is a constant of 1. A value above this constant suggests that the authorities are making appropriate efforts to ensure transparency; a value below it indicates that they are not.

To address the second research question, we needed to identify the variables influencing transparency and openness in budget data. To deliver this, we applied correlation and regression analysis methods, similar to those used in other studies mentioned earlier (Guillamón et al., 2011; Ribeiro et al., 2017; Stanic, 2018; Tavares & Da Cruz, 2017). We focused on our Ukrainian colleagues' stance (Slukhai et al., 2019) in the factor search and identification approach because many challenges in local finance management in Ukraine and Belarus are comparable. In this regard, we employed the same sets of variables: financial, territorial, and social.

4. Simple OLBIT Model

We first modelled the level of transparency of local budgets (OLBIT). The model for assessing the level of transparency of local budgets is based on the use of criteria for compliance of information support (Ki) and the average value of the ranked scores of expert evaluations (Bi), as follows:

$$B_{main} = \sum_{i=1}^{16} B_i \times K_i \qquad (2)$$

$$B_{main} = \sum_{i=1}^{16} B_i \times K_i$$

where Bmain – is the sum of points of the main rating of openness and transparency of local budgets.

Bi - scores of the openness and transparency rating of local budgets of factor i;

Ki - existence of corresponding blocks of information (0- absence, 1-presence).

In addition to the primary assessment of information availability, we evaluated indirect characteristics, such as informative content and the usefulness of budget information on ATU websites. We analysed the data independently of experts. Here, we evaluated the significance of the criteria on a 10-point scale (to ensure the proportionality of the assessment ranks) based on the obvious usefulness of the depth of presented information (deeper reported data is better) where the time range is: for 4 years or more get 10 points, for 3 years-7.5 points, for 2 years – 5 points, for 1 year – 2.5 points. We evaluate the budget information's relevance based on publication frequency and recency; the latest publication earns 10 points if it is less than one month old, 7.5 points if it is 2-3 months old, 5 points if it is 3-6 months old, and 2.5 points if it is older than 6 months.

The model for estimating the depth of data representation has the following format:

$$Bdepth = k4years \times 10 + k3years \times 7.5 + k2years \times 5 + k1year \times 2.5 \quad (3)$$

where Bdepth - is the sum of points based on the depth of the time range of information provided,

k*years - the factor of availability of information blocks (0 - absence, 1 – presence).

The model of relevance of information looks similar to the previous one:

$$Brelev = z1\ month \times 10 + z3months \times 7.5 + z6months \times 5 + z{>}6months \times 2.5 \quad (4)$$

where Brelev - the sum of points based on the relevance of the information provided,

z*month - factor for the presence of information blocks (0 - absence, 1 – presence).

The final score of the transparency rating consists of all three elements:

$$Btotal = Bmain + Bdepth + Brelev \quad (5)$$

The model for assessing the authorities' efforts to ensure transparency of local budgets is based on the use of the same criteria for compliance of information provision (Ki) and an indicator of the weight of these criteria (Yi):

$$Y_{main} = \sum_{i=1}^{16} Y_i \times K_i$$

$$Y_{main} = \sum_{i=1}^{16} Y_i \times K_i \quad (6)$$

where Ymain - assessment of authorities' efforts to ensure transparency of local budgets;

Yi - indicator of the weight of openness and transparency of local budgets of factor i.

We assessed the indirect parameters of informative content and the relevance of budget information on the ATU sites, using a score-based assessment of local budget transparency. However, we used weighted percentage values instead of a 10-point scale; i.e. the depth of informative content on budget was evaluated as follows: for 4 years or more, 10%; for 3 years, 7.5%; for 2 years, 5%; for 1 year, 2.5%. The assessment of relevance of budget information was this way: less than 1 month – 10%, 2-3 months – 7.5%, 3-6 months – 5% and more than 6 months - 2.5%.

The sum of the three components represents the total value of the authorities' efforts to guarantee local budget transparency:

$$Ytotal=Ymain+Ydepth+Yrelev \quad (7)$$

Therefore, this indicator (Ytotal) provides a proportion of the objective score for budget transparency (Btotal), which measures the authorities' efforts to attain it. Besides dynamic analysis, this method enables us to apply the suggested indicators for benchmarking and comparative study.

Following the computation of the OLBIT index, the authority's efforts to guarantee fiscal transparency were assessed. Then, using paired correlation dependency, the factors affecting transparency were examined. Financial factors and geographical and demographic variables were the two categories into which these issues were separated. We made recommendations on specific actions to increase the transparency of local ATU budgets in Belarus, based on the findings.

The OLBIT model shows that all of Belarus's ATUs still lack the necessary degree of fiscal transparency. According to several standards, local governments' sharing of budget information was minimal.

There were instances in which the budget information supplied on ATU websites was utterly inadequate. Information on local authorities' borrowing practices, the implementation of current investment projects, draft budgets for discussion, budget hearings with citizen representatives, and discussions about the annual budget was notably lacking.

A lack of action in this area might explain the lack of information on upcoming loans on local authority websites; however, the Ministry of Finance's Bulletin[3] showed the opposite - an active borrowing policy among nearly all local authorities, with each local government incurring debt across various budgetary credits, loans, and bonds. Its magnitude also rises in certain ATUs, including past-due balances on budgetary loans and borrowings.

The local council should be responsible for overseeing the various (even minor) investment projects funded by the local budget and initiated by the populace and local authorities. Examples of these projects include building, repairing, and constructing local roadways. At the same time, details of its costs must be disclosed. The Ministry of Finance and regional executive committees reported on current investment projects, but the ATU locations typically kept the public uninformed about them.

It seems local officials are unwilling to share information on budget discussions and drafts for the ATU's annual budget. The feedback system on every ATU website allows the public to submit an electronic appeal, but it takes proactive citizen behaviour. The approved annual budget, the annual budget implementation report, and the quarterly and semi-annual reports across all ATUs are presented more clearly. However,

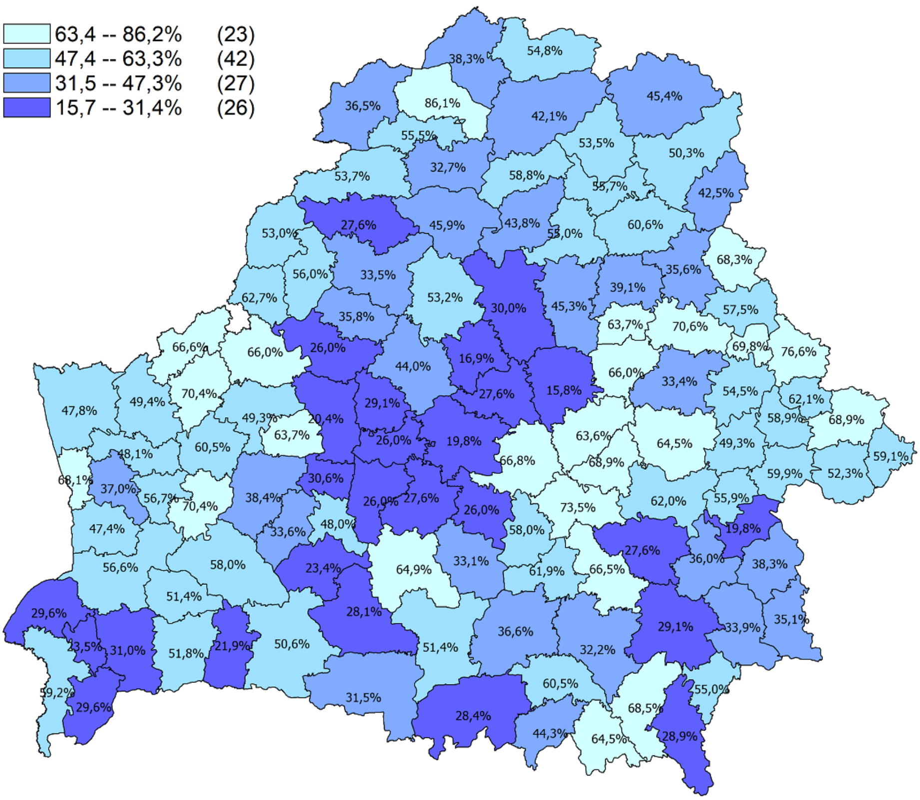
3 Bulletin on the local budgets' execution for 2021. https://www.minfin.gov.by/upload/bp/bulletin/2021/2021.pdf (in Russian)

their transparency and openness scores are about average.

On average, we receive 43.7% of the expected information on local budgets within the 100% possible range, according to the aggregate index that gauges the disclosure of such information. It illustrates the inadequate degree of financial openness of municipal budgets across all ATUs in Belarus. The budgets of the Mogilev area (62.92%), Grodno region (57.52%), and Vitebsk region (51.04%) had the highest OLBIT index. The budgets for the Gomel area (44.09%), Brest region (42.19%), and Minsk region (32.31%) had the lowest openness and transparency scores. Overall, Figure 3 shows the openness and transparency of all base-level ATU budgets.

Figure 3:

OLBIT Heat Map on the Basic Territorial Level of Belarus



Source: Authors' own, 2025

The investigation revealed the most transparent and open local budgets. The Miorsky rayon of the Vitebsk region led with 86.1% out of 100% (140.82 points), followed by the Mstislavsky rayon with 76.6% (125.18 points), the Bobruisk city and Mogilev one with 75% (122.64) and 74.2% (121.32), respectively, the Bobruisk rayon and the Baranovichi city with the same 73.5% (120.20), the Shklovsky rayon with 70.6% (115,36), and the Lida and Slonim rayon with 70.4% (115,18). The rayons of Chechersky, Pukhovichsky, Smolevichsky, and Berezinsky are at the bottom of the list with transparency indicators below 20%.

Out of 128 local budgets, 23 had the maximum transparency range, which was between 63.4% and 86.2%; 42 rayons had the range between 47.4% and 63.3%; 27 rayons had the range between 31.5% and 47.3%; and 26 rayons had the minimum transparency range, which was between 15.7% and 31.4%. Particularly noteworthy are the findings of evaluations showing that urban ATUs had 10.6 percentage points more local budget openness than rural ones. As a result, the municipal budget transparency index averaged 47.0% in rural areas and 57.6% in cities.

5. Assessment of the authorities' efforts in attaining budget openness and transparency (weighted OLBIT model)

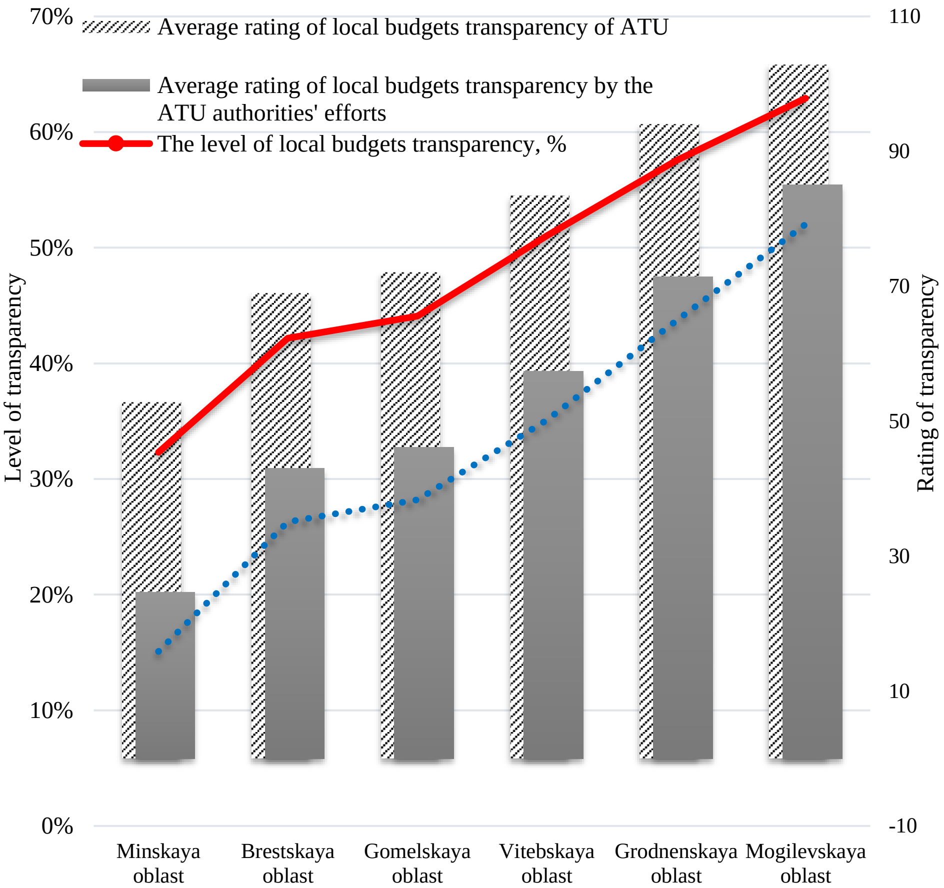
The data on the general status of local budget transparency and openness did not yet address how much local authorities are doing to achieve openness and transparency, nor the leaders and laggards in this area.

We evaluated the degree of openness and transparency of online information about the municipal budget using the weighted indicators (Yi) for all information blocks. In contrast to expert score-rating assessments, this indicator begins with a relative value and indicates the degree of information saturation about the local budget at the ATU sites. As a result, we interpret this assessment as the authority's efforts to ensure the openness and transparency of local budgets, because it considers only the presence or absence of the relevant information factor and its weight, rather than the sum of the experts' estimated points.

The following figure 4 describes the assessment findings of authorities in their attempts to guarantee the publication of budget information (see calculations in Appendix tables A.3, A.4). According to the statistics, the authority's attempts to disclose budget information, reflected in points, do not always correlate to the level of openness and transparency of local budgets as measured by the OLBIT. There is a larger disparity between the level of openness attained and the efforts of the authorities in lagging regions. Consequently, the Minsk region surpasses 17% in the OLBIT index, while the Mogilev region leads by 10%. We can presume that the principle of marginal costs applies to the expenses associated with maintaining the openness and transparency of local budgets. It shows that local authorities find it easier and less expensive to comply with formal ways when filling out websites with budget information. In contrast, attempts to raise awareness do not result in the same improvement in local budget indicators of transparency and openness. There is no doubt that this circumstance does not encourage the local government to be more transparent.

Figure 4:

Ratings of Regional Authorities' efforts in disclosure of budget information and OLBIT



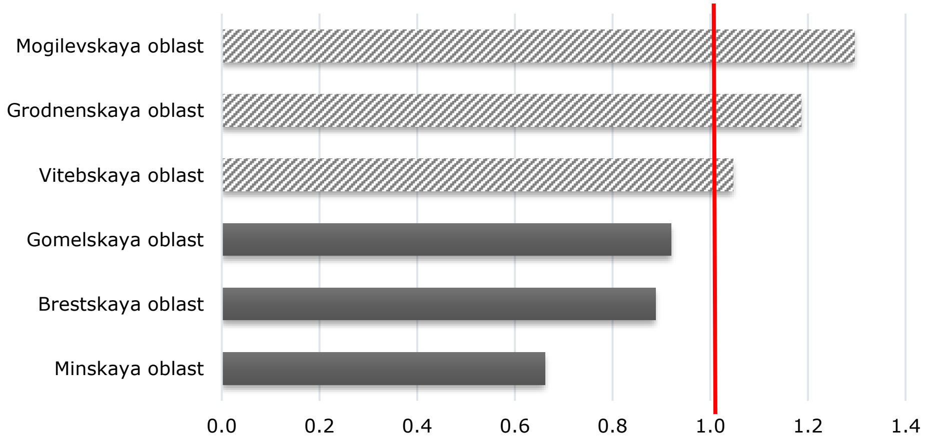
Source: Authors' own, 2025

The distribution of efforts to release budget information by the average Republic value, which ensures the openness and transparency of local budgets across regions, enabled the ranking of the coefficient of authorities' efforts. Figure 6 depicts the relative productivity of all ATUs in each region.

Notably, when we analyse within the regional context, we obtain greater diversity without resembling the overall image. On the right side of Figure 5, Mogilev, Grodno, and Vitebsk are the most transparent regions. The capacity of local budgets to pay for expenses out of their own resources and the transparency level indicators showed negligible and weakly negative relationships. Simultaneously, the outcomes in these oblasts were extremely dispersed, suggesting a high degree of regional homogeneity in these variables. The values for individual ATUs within the region vary greatly in Minsk, Brest, and Gomel, which are outside the transparency rating.

Figure 5:

Coefficient of regional authorities' efforts to ensure transparency of local budgets



Source: Authors' own, 2025

If we calculate the average coefficient for the authorities' efforts, the Mogilev area emerged in first place with a value of 1.3, the Grodno region with a coefficient of 1.19, and the Vitebsk region with a coefficient of 1.05. The Gomel, Brest, and Minsk authorities' efforts to guarantee the transparency and openness of municipal budgets were below average - 0.92, 0.89, and 0.66, respectively, and may be regarded as inadequate.

6. Identification of factors for openness and transparency of local budgets in Belarus

The bubble diagram shows the level of transparency provided by local budgets, thanks to local authorities' efforts (Figure 6). Correlation-regression study of financial components revealed no significant relationships or dependencies with financial indicators (Table 3). In this instance, the direct link correlation coefficient (0.0218) and the inverse link correlation coefficient (-0.2165) were both below the threshold. The entire computation is displayed in Table 3 below.

Table 3:

Correlation Coefficient between OLBIT and financial factors

ATUs	The share of own budget revenue	Total budget revenue	Own budget revenue per capita	Total budget revenue per capita
All ATUs	-0.1726	0.0218	-0.2165	-0.0060
Urban ATUs	-0.2652	0.0050	-0.2546	0.1012
Rayon ATUs	-0.2309	-0.1849	-0.2217	0.0015
Brestskaya oblast	0.4075	0.5037	0.1724	-0.5148
Vitebskaya oblast	0.0054	-0.1695	-0.0338	-0.0319
Gomelskaya oblast	-0.0872	-0.1622	-0.0391	-0.0140
Grodnenskaya oblast	-0.0484	0.0965	-0.1922	-0.1645
Minskaya oblast	0.2539	0,3696	0.0884	-0.0254
Mogilevskaya oblast	-0.1729	-0.18736	-0.3859	-0.2575

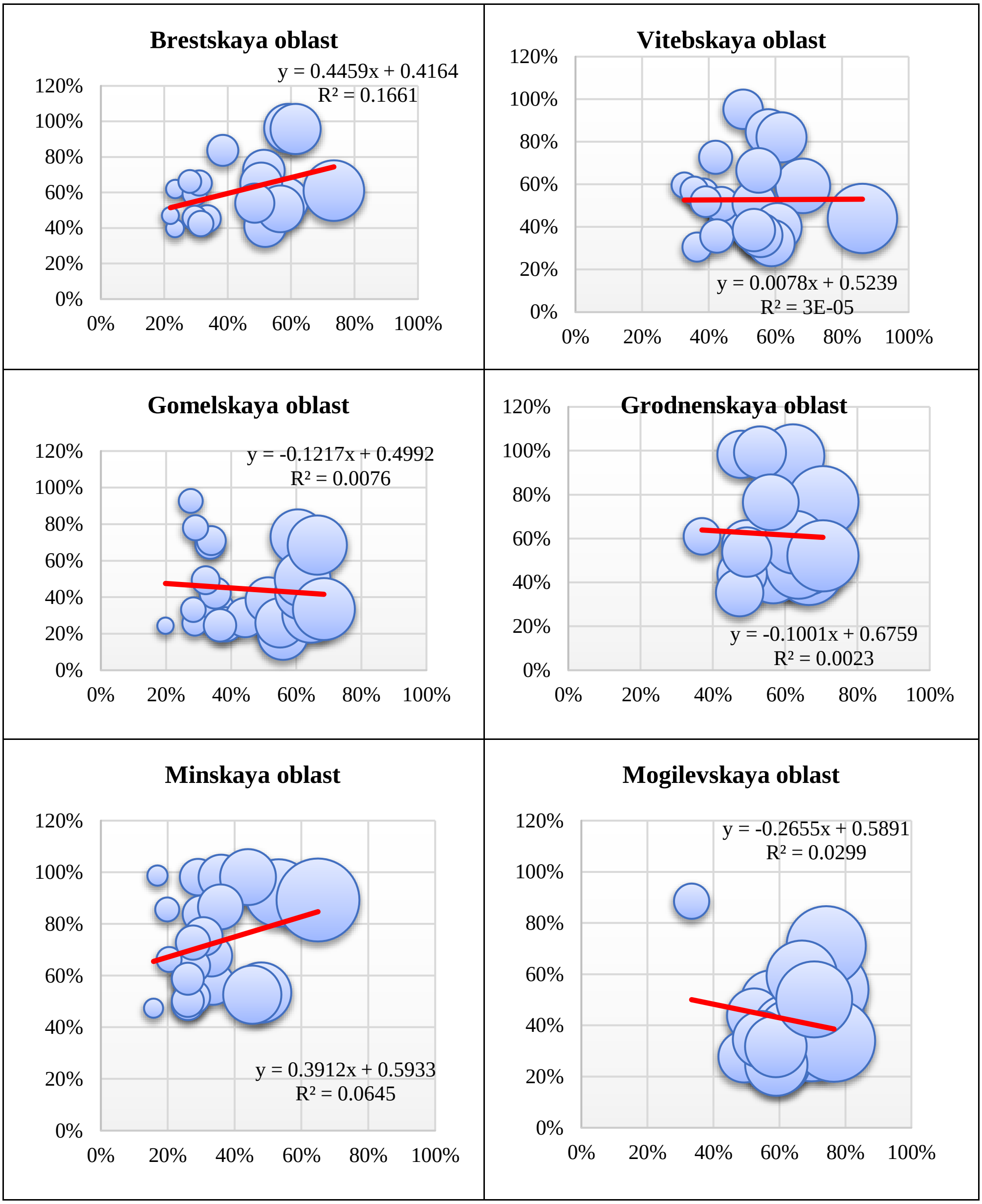
Source: Authors' own, 2025

However, when these relationships were 'probing' in a regional context, the correlation coefficients for openness and transparency with respect to the Brest region's total budget revenues and its own revenue share in all budget revenues were 0.5037 and 0.4075, respectively. At the same time, there was an inverse reliance (-0.5148) on the total budget revenue per capita factor.

It is worth noting that when we examine particular oblasts, we find more variation but little relation to the national picture.

Figure 6:

Correlation between the own revenues share and OLBIT



Source: Authors' own, 2025

Another intriguing aspect of these oblasts was the weak yet positive correlations between the transparency metrics and the ability of local budget expenditures to be covered by local resources. Naturally, the linkages found do not support the concept nationwide, but they do open the possibility of a more thorough examination broken down by region in the future.

All things considered, there is no proof that financial metrics influence openness and transparency. This study also failed to support the idea that territorial-demographic characteristics, like population density, area, and size, influence budget information disclosure. We can highlight Brest oblast as an exception to the overall trend, as there was an observable tight connection between the population (0.4889) and the population density per resident (0.4701).

Table 4:

Correlation Coefficient of OLBIT on geographical and demographic factors

ATUs	Area (sq.km)	Population	Population Density (per sq.km)
All ATU	-0.2671	0.0579	0.1422
Urban ATU	0.1755	-0.0867	-0.5997
Rayon ATU	-0.2122	-0.1676	-0.1155
Brestskaya oblast	-0.1556	0.4889	0.4701
Vitebskaya oblast	-0.3236	-0.0606	0.1909
Gomelskaya oblast	-0,1588	-0,1599	-0,1510
Grodnenskaya oblast	-0,2434	0.1254	0.1087
Minskaya oblast	0.1602	0.3442	0.0986
Mogilevskaya oblast	-0.3461	0.3389	0.3702

Source: Authors' own, 2025

Nevertheless, these findings do not support a claim of a significant correlation between the openness and transparency of local budgets and demographic and territorial characteristics.

Disparities in the degree of budget information disclosure between rural and regionally subordinate cities were the sole finding that may prompt us to look further for the elements that drive budget transparency and openness. The main distinguishing characteristic was that urban ATU local budgets were 10.6 percentage points more transparent than rural ones. As a result, municipal budgets had an average transparency index of 47.0%, whereas city budgets had an average of 57.6%.

The existence of such disparities gives rise to numerous theories on socio-political issues. Education, the presence of qualified scientists and experts, the activities of civil society organisations, and engaged and proactive citizen groups are the first factors. They might act as catalysts to guarantee population-level budgeting awareness. The next step in our investigation into the transparency and openness of local budgeting should be to confirm these theories. However, we must remember that this field faces objective limitations such as a lack of genuine local self-government, a rigid vertical power system (as several studies of civil society institutions have shown), and limited opportunities for civic participation.

7. Discussion and conclusions

The analysis demonstrates once more how little the local budgeting system has developed since the fall of the Soviet Union. We assume that the local financial system was opaque to the public at the time. For the citizens, philosophy and the traditional interpretation of the function and importance of local finances remained unchanged. Although people call them local, these budgets function as branches of the central budget in their respective municipalities, and the public views them as subordinate to the higher state budget.

The lack of comprehensive and accessible budget information on local government websites undermines public trust and engagement in local governance. The municipal budget's lack of exposure and intelligibility on local government websites seriously diminishes its significance. Other informational sections' significance overshadowed the budget, a crucial document for citizens, preventing it from having its own section. The Executive Committee's Financial Department frequently relegated budget information to the economy or social block, or other non-core budget information blocks. Because of this, it took more work to search using specific search parameters. Instead of being available on their own websites, several ATU websites redirected the URLs to formal budget approval documents and performance reports to legal portal sites, sometimes causing access problems, undermining the value of this document and giving the idea that budget topics are of secondary importance to the local community due to the current disorganised, dispersed, and haphazard budget information.

According to the report, local government autonomy in the budget process is very low, and centralisation in local financial management remains substantial. These results are based on budgetary data available on the websites of the local authorities and are not the product of the writers' speculative arguments. Many regional and local executive committees' websites frequently repeat the statement that "local budget planning is based on the basic scenario of forecasting the parameters of socio-economic development and monetary policy of the Republic of Belarus and the indicators of the socio-economic plan" It is sufficient to mention this statement. However, it does not address the particular spending requirements of local government. Given this knowledge of the local budget, it is evident that local budget planning is an administrative process within the Ministry of Finance's budget hierarchy. The local government simply accepts the project budget supplied by the Ministry of Finance for formal legitimisation and subsequent implementation. It is hard to imagine the local budget being 'our' - that is, truly independent and owned by the residents of local communities - under these conditions.

There is a significant lack of public involvement in budget discussions, indicating either apathy or barriers to participation. Despite their involvement in talks on the environment, industrial and agricultural facilities, urban planning, and other matters of public concern, we discovered that there were no budget hearings or discussions of draft budgets, including active citizen groups. As a result, two opposing viewpoints have emerged: either people do not care about the local budget, or there are legal and institutional barriers to public control. Article 15, point 3.8, of the Belarusian Law on Local Government and Self-Government, on the other hand, states that citizens must attend the session when a draft Council decision is introduced. In other situations, the Praesidium of the Council may decide that citizen participation is required (Law No. 108-Z, 2010/2026). The openness and transparency of local finances may suffer significantly if this situation persists in a community.

The quality and completeness of budget data vary significantly across different administrative territorial units (ATUs), leading to confusion and mistrust among citizens. Moreover, lastly, the quality of the budget data. We have observed significant disparities in the comprehensiveness and depth of the municipal budget information given. Only line-by-line data on income and expenses was available on many ATUs' websites, including the budget for citizens. There is very little information disclosed regarding borrowings and their intended uses. Due to limited data from many ATUs, we have limited information on the execution of budget programs and subprograms. The primary characteristic of budget information displayed on websites is fragmentation. Instances where the Ministry of Finance's or the regional Executive Committee's websites provided budget information could be identified. In addition, we discovered impressive illustrations of the breadth and calibre of the budget data offered. Furthermore, these instances were from ATUs at the primary level, where the completeness and quality of the budget information provided was far better than that of upper and local rayon authorities.

The anticipated changes to public administration in Belarus necessitate a re-examination of current methods for local financial and budgetary transparency. The amount and quality of information on local budgets and finances, or the transparency of budget information, are crucial factors in determining the proper degree of good governance and public management. There is a great need to assess transparency at the basic and primary levels of local government. Since the current ratings do not cover these types of territorial units, it is important to determine whether they are adequate.

The transparency indicator OLBIT (snapshot technique) proposed in this study is expected to help rapidly obtain a transparency assessment for a specific territorial unit. Applying this strategy in practice will enable an evaluation of the current level of transparency at the lowest level of Belarus' budgetary system. The model's performance was assessed using the suggested methodology on the 2020 data set. The findings are consistent with current theoretical frameworks and can serve as a basis for comparative analysis of local budgets, as in Belarus and other countries.

According to our research, the basic level ATU's transparency is currently relatively poor. Although ATUs have websites, they currently do not use them to provide the public with more thorough financial and budgetary information. Our study has demonstrated that ATUs do not adequately educate the public about their financial issues.

The evaluation of the authorities' attempts to fully disclose budget information indicates that the level of openness and transparency of local budgets does not always match their efforts to release budget information. The gap between the authorities' efforts and the level of openness achieved is greater in lagging regions. Thus, the gap between the leader, the Mogilev region, and the last on the list, the Minsk region, is 10%, while the Minsk region already exceeds 17%. Local authorities find it less expensive and simpler to populate websites with budget information using formal techniques. In contrast, efforts to enhance awareness do not yield the same increase in openness and transparency of local finances. There is no doubt that the current situation does not encourage the local administration to be more transparent.

Our calculations indicate that no more than 50% of ATUs have a comprehensive folder of open fiscal information (almost half of the 16 indicators are accessible on their websites). Additionally, there is a notable variation in this indicator's distribution among regions, including ATUs at the local level.

One of our findings was that ATEs' degree of transparency is not sufficiently correlated to their local budget size, revenue, area, and population, which undermines the credibility of further incentives for officials to make local budgets and finances more accessible to the public. A possible explanation is that the current base-level rates used for regression and correlation are not sufficiently quantified.

The number of grassroots-level ATUs is anticipated to reach 300 units as a result of the administrative-territorial reform. With this figure, findings on the components influencing transparency can validate our influence hypotheses, determined using regression and correlation techniques. However, other factors, particularly those of a political and ideological nature, may also affect the transparency and openness of Belarus's local budgets. All of this raises the possibility of conducting further research in this field.

Recapitulating the results, we can conclude that more institutional requirements must be established to make budget data publicly accessible at both the local and national levels. For this reason, the Belarusian government must make a special effort to provide local authorities with the necessary data and technological support so they can recreate their websites and impose more stringent content restrictions. The community and civil society should exert equal pressure on local leaders to be more forthcoming with critical information. In municipal budgeting, developing openness and transparency means ensuring that everyone has a say in the process and can see how money is being spent. Being open and transparent ensures prudent resource use and fosters confidence.

Acknowledgements

This paper was prepared within the framework of the submitted grant under the European Union program EU4Belarus: Support for Advanced Learning and Training (SALT II) https://www.cpva.lt/en/international-cooperation/calls-for-proposals/884/k82https://www.cpva.lt/en/international-cooperation/calls-for-propo sals/884/k82, and presented for publishing in the NISPAcee Journal 'Public Administration Policy'.

References

Alt, J. E. (2019). Twenty Years of Transparency Research. *Public Sector Economics, 43*(1), 5–13. https://doi.org/10.3326/pse.43.1.2

Andonova, V. G., Nikolov, M., & Petrovska, A. M. (2017). Governance, Transparency and Accountability at Local Government Level: Budget Transparency of Macedonian Municipalities. *CEA Journal of Economics*, *12*(1), 23–38. https://www.ceeol.com/search/article-detail?id=772111

Birškytė, L. (2018). Determinants of Budget Transparency in Lithuanian Municipalities. *Public Performance & Management Review*, *42*(3), 707–731. https://doi.org/10.1080/15309576.2018.1507915

Bronić, M., Stanić, B., & Prijaković, S. (2022). The Effects of Budget Transparency on the Budget Balances and Expenditures of Croatian Local Governments. *South East European Journal of Economics and Business*, *17*(1), 111–124. https://doi.org/10.2478/jeb-2022-0008

Caamaño-Alegre, J., Lago-Peñas, S., Reyes-Santias, F., & Santiago-Boubeta, A. (2012). Budget Transparency in Local Governments: An Empirical Analysis. *Local Government Studies*, *39*(2), 182–207. https://doi.org/10.1080/03003930.2012.693075

Fourie, J. J. (2019). *A Framework to Enhance Budget Transparency in Local Government* [PhD dissertation, Stellenbosch: Stellenbosch University]. https://scholar.sun.ac.za/server/api/core/bitstreams/96078866-42f6-43b7-9438-597b851285bb/content

Guillamón, M., Bastida, F., & Benito, B. (2011). The Determinants of Local Government's Financial Transparency. *Local Government Studies*, *37*(4), 391–406. https://doi.org/10.1080/03003930.2011.588704

Haustein, E., & Lorson, P. C. (2022). Transparency of Local Government Financial Statements: Analyzing Citizens' Perceptions. *Financial Accountability and Management*, *39*(2), 375–393. https://doi.org/10.1111/faam.12353

Hu, Q., Zhang, L., Zhang, W., & Zhang, S. (2020). Empirical Study on the Evaluation Model of Public Satisfaction With Local Government Budget Transparency: A Case From China. *Sage Open*, *10*(2). https://doi.org/10.1177/2158244020924064

IBP. (2024). *Open Budget Survey 2023*. International Budget Partnership. https://internationalbudget.org/open-budget-survey-2023/

Krivorotko, Y. V., & Sokol, D. V. (2021). Online Openness and Transparency of Local Budgets in Belarus. *Central European Economic Journal*, *8*(55), 144–162. https://doi.org/10.2478/ceej-2021-0009

Lapsley, I., & Ríos, A. (2015). Making Sense of Government Budgeting: An Internal Transparency Perspective. *Qualitative Research in Accounting & Management*, *12*(4), 377–394. https://doi.org/10.1108/qram-01-2015-0014

Law of the Republic of Belarus No. 108-Z, About local authority and self-government in the Republic of Belarus (2010, January 4). *National Legal Internet Portal of the Republic of Belarus*. (Incorporates amendments as of March 16, 2026).

National Cadastral Agency. (2025). *Unified Register of Administrative-Territorial and Territorial Units*. https://nca.by/about/activity/adresnaya-sistema-respubliki-belarus/edinyy-reestr/#

Ott, K., Mačkić, V., & Bronić, M. (2018). Budget Transparency of Local Governments: The Political Economy of City and Municipality Budgets in Croatia. *Drustvena Istrazivanja*, *27*(4), 629–647. https://doi.org/10.5559/di.27.4.03

Pintea, M.-O. (2014). Transparency of Local Budgets in the Center Region of Romania. *Virgil Madgearu Review of Economic Studies and Research*, *7*(1), 81–96. https://econ.ubbcluj.ro/rvm/an_VII_nr_1.pdf

Ribeiro, N., Nogueira, S., & Freitas, I. (2017). Transparency in Portuguese Local Government: A Study of its Determinants. *European Financial and Accounting Journal*, *12*(3), 191–202. https://doi.org/10.18267/j.efaj.196

Ríos, A., Guillamón, M., Benito, B., & Bastida, F. (2018). The Influence of Transparency on Budget Forecast Deviations in Municipal Governments. *Journal of Forecasting*, *37*(4), 457–474. https://doi.org/10.1002/for.2513

Sedmihradská, L. (2015). Budget transparency in Czech local government. *Procedia Economics and Finance*, *25*, 598–606. https://doi.org/10.1016/s2212671(15)00774-1

Sedmihradská, L. (2019). Budget transparency innovation in the Czech local government. *Central European Journal of Public Policy*, *13*(1), 23–32. DOI: 10.2478/cejpp-2019-0002

Slukhai, S., Demydenko, L., Nakonechna, Y., & Borshchenko, T. (2019). The Principle of Transparency in the Ukrainian Decentralisation Reform. *Central European Public Administration Review*, *17*(2), 141–166. https://doi.org/10.17573/cepar.2019.2.07

Slukhai, S., Demydenko, L., Nakonechna, Y., & Borshchenko, T. (2019a). Ukrainian Local Budget Transparency: Challenges of Fiscal Decentralization. In *27th NISPAcee Annual Conference*. NISPACee. https://www.nispa.org/files/conferences/2019/e-proceedings/system_files/papers/ukrainian-local-slukhai.pdf

Stanic, B. (2018). Determinants of Subnational Budget/Fiscal Transparency: A Review of Empirical Evidence. *Public Sector Economics*, *42*(4), 449–486. https://doi.org/10.3326/pse.42.4.4

Tavares, A. F., & Da Cruz, N. F. (2017). Explaining the Transparency of Local Government Websites through a Political Market Framework. *Government Information Quarterly*, *37*(3), 101249. https://doi.org/10.1016/j.giq.2017.08.005

Appendix

Appendix A: Table A.1: Expert assessment of budget information indicators

Estimated Indicators	Average score	Experts*:										
		1	2	3	4	5	6	7	8	9	10	11
x1	6.2	8	5	6	7	2	1	9	4	8	9	4
x2	8.0	8	10	9	9	5	7	8	3	10	9	10
x3	7.5	10	8	8	8	5	8	10	3	10	7	5
x4	7.7	9	10	9	4	7	8	10	3	8	9	8
x5	8.8	10	10	10	10	10	8	10	3	8	8	10
x6	7.5	8	9	8	6	8	8	7	1	9	10	9
x7	8.5	10	10	10	9	9	1	10	4	9	7	7
x8	8.2	10	9	9	8	9	6	10	4	8	9	8
x9	6.3	9	9	8	1	6	7	10	3	5	5	6
x10	5.9	8	7	7	6	5	5	7	3	5	7	5
x11	6.1	8	5	6	7	7	6	7	3	5	7	6
x12	7.2	10	5	8	9	5	8	7	5	9	8	8
x13	7.9	10	6	9	8	6	8	8	6	9	8	9
x14	7.3	10	8	9	8	5	8	9	3	8	7	5
x15	7.6	10	10	10	5	3	9	10	3	10	9	5
x16	5.9	8	8	8	2	4	6	8	3	7	8	3

* We carried out the assessment on a 10-point scale (1 - not significant to 10 - the most significant criterion)

Source: Authors' own, 2025

Appendix B: Table A.2: Matrix of transformed ranks of expert assessment

Indicators / Experts	1	2	3	4	5	6	7	8	9	10	11	Sum of ranks	d	d2	Indicator weighting
x1	3.5	2	1.5	7.5	1	1.5	8.5	13	7	13	2	60.5	-33	1089	4.0%
x2	3.5	14	11	14	6	7.5	6	6.5	15	13	15.5	112	18.5	342.25	7.5%
x3	12.5	7	6	10.5	6	12	13	6.5	15	4	4.5	97	3.5	12.25	6.5%
x4	7.5	14	11	3	11.5	12	13	6.5	7	13	11	109.5	16	256	7.3%
x5	12.5	14	15	16	16	12	13	6.5	7	8.5	15.5	136	42.5	1806.25	9.1%
x6	3.5	10	6	5.5	13	12	2.5	1	11.5	16	13.5	94.5	1	1	6.3%
x7	12.5	14	15	14	14.5	1.5	13	13	11.5	4	9	122	28.5	812.25	8.2%
x8	12.5	10	11	10.5	14.5	5	13	13	7	13	11	120.5	27	729	8.1%
x9	7.5	10	6	1	9.5	7.5	13	6.5	2	1	7.5	71.5	-22	484	4.8%
x10	3.5	5	3	5.5	6	3	2.5	6.5	2	4	4.5	45.5	-48	2304	3.0%
x11	3.5	2	1.5	7.5	11.5	5	2.5	6.5	2	4	7.5	53.5	-40	1600	3.6%

x12	12.5	2	6	14	6	12	2.5	15	11.5	8.5	11	101	7.5	56.25	6.8%
x13	12.5	4	11	10.5	9.5	12	6	16	11.5	8.5	13.5	115	21.5	462.25	7.7%
x14	12.5	7	11	10.5	6	12	8.5	6.5	7	4	4.5	89.5	-4	16	6.0%
x15	12.5	14	15	4	2	16	13	6.5	15	13	4.5	115.5	22	484	7.7%
x16	3.5	7	6	2	3	5	6	6.5	4	8.5	1	52.5	-41	1681	3.4%
Σ	136	136	136	136	136	136	136	136	136	136	136	1496		12135.5	

Source: Authors' own, 2025

Appendix C: Table A.3: Level of transparency in ATU local budgets by regions

Oblasts/Regions	**Number of matches in monitoring indicators, (Ki)**	**Local budget transparency score, (Bi)**	**Potential local budget transparenc y score, (Bmax)**	**Transparenc y level of local budgets, Bi / Bmax**
Brestskaya oblast	109	1310.55	3106.5	42.19%
Vitebskaya oblast	174	1919.27	3760.5	51.04%
Gomelskaya oblast	143	1585.95	3597.0	44.09%
Grodnenskaya oblast	161	1692.86	2943.0	57.52%
Minskaya oblast	114	1214.95	3760.5	32.31%
Mogilevskaya oblast	223	2366.23	3760.5	62.92%
all ATU	924	9147	**20928**	43.7%

Source: Authors' own, 2025

Appendix D: Table A.4: Level of regional authoritie's efforts to ensure openness and transparency of ATU local budgets

Oblasts/Regions	**Authorities' efforts to ensure transparency of local budgets, (Yi)**	**Ratio of authority efforts to ensure transparency of local budgets, (Yi) / (Yaverage)**	**Local budget transparenc y rating points of authorities' efforts, (Biauth)**	**Local budgets transparency level ensured by authorities' efforts, Biauth / Bmax**
Brestskaya oblast	55.38%	0.89	817.1	26.3%
Vitebskaya oblast	65.26%	1.05	1319.6	35.1%
Gomelskaya oblast	57.37%	0.92	1014.8	28.2%
Grodnenskaya oblast	73.93%	1.19	1285.1	43.7%
Minskaya oblast	41.23%	0.66	567.4	15.1%
Mogilevskaya oblast	80.74%	1.30	1956.5	52.0%
All ATU	62%			33.4%

Source: Authors' own, 2025