

AN ASSESSMENT OF LOCAL BUDGETS OPENNESS AND TRANSPARENCY IN BELARUS

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ABSTRACT

World experience shows that public participation in the budget process, openness in the public sector are the necessary conditions for a proper economic strategy of the State. Financial openness, in the broadest sense, today represents an important feature of proper fiscal and monetary policy. In a narrow sense, it is more often associated with the openness of the budget process, especially at the local level. Financial openness contributes to the efficient collection and distribution of public resources. It expands the responsibility of governments, strengthens the trust of citizens, and prevents opportunities for corruption.

This paper attempts to develop and test a compact methodology for the operational analysis of online information openness and transparency of the budget process at the local level. The developed methodology involves the use of two criteria: (1) the level of transparency of local budget and (2) an assessment of authority's efforts in ensuring transparency of local budgets. The basis of the methodology is expert assessments of the informational significance of particular elements of websites of local authorities in issues of local finance and budget. Based on expert assessments of the significance and actual availability of these information elements, we evaluate an integrated assessment of the information content of local authorities' sites during 2020. The resulting assessment of the information content of the site with the local budget and finances data we interpret as the online openness and transparency of local budgets (Online Local Budget Index of Transparency - OLBIT). In addition, we evaluate what factors (financial, geographical and demographic) affect the transparency level measured by OLBIT.

KEY WORDS: *budget openness, budget transparency, local budget, open budget, fiscal decentralization.*

JEL Classification: *H61, H72, H83*

1. Introduction

Fiscal transparency is a critical element of effective public financial management, one that helps in building market confidence and underpins economic sustainability. Fiscal transparency also fosters greater government accountability by providing a window into government budgets for citizens, helping them to hold their leadership accountable and facilitating better-informed public debate (*Alt, J., 2019. p. 6*).

It is no coincidence that international financial organizations consider the borrowing capacity and other financial assistance to countries depending on the degree of their financial openness and transparency.

Openness and transparency of the budget is particularly important for countries with economies in transition, which do not have a long tradition of public administration compatible with the market economies traditions and advanced democracies. Low transparency can lead to a lack of public control over appointed officials and elected politicians, misuse of public financial resources, and inefficient spending. That is why achieving of sufficient level of transparency is one of the most

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important goals for countries that are reforming their public administration, public and local Finance in order to achieve modern standards of governance.

In recent years, the topic of openness and transparency are starting to attract serious attention not only from representatives of civil society, but also from the Belarusian government. The officials have become aware that financial transparency is one of the prerequisites for reliable and successful cooperation with international financial organizations in the implementation of important socio – economic projects. This has created an impetus for the study of financial openness and transparency among both non-government and government institution. The first initiative pilot study (not official one) of financial openness and transparency was conducted in 2017 by the non-governmental organization SYMPA with support from the World Bank. The results of this study showed that Belarus’ positions were quite low. Belarus has developed and published 5 of the 8 key documents assessed by the “Open Budget Survey” according to the data obtained, Belarus’ rating was in the range of 0-20 points, which means that there is still insufficient public provision of budget information. The interest shown by government agencies in this topic led the Ministry of Finance to apply for its inclusion in the official rating “Open Budget Survey”, which is going to take place in 2021.

At the same time, the available research concerns only public finances and budgeting on national level and does not affect the finances of local authorities, which accounts almost 50% of the total consolidated budget of the Republic of Belarus. This circumstance makes the analysis of transparency trends in local budgets of Belarus extremely relevant, especially in view of tight links of local budgets spending and real people needs in communities.

The administrative-territorial structure of Belarus consists of the capital - the city of Minsk - and six areas (*Krivorotko, Y., 2008, p.51*). In Belarus there are 1308 administrative territorial units that include six oblasts and the Minsk city, ten cities of oblast submission, 14 cities of rayon submission, eight settlement councils, 1,151 village councils.

Table 1. Belarusian Local Authorities in administrative territorial units (01.01.2020)

Levels of local authorities	Kind of administrative and territorial units	Number of local councils	Kind of 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	1151	Executive committee
	Total	1173	Primary Councils
	Totally	1308	Councils

Source: Compiled by the authors on the basis of national statistics data.

This study aims 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), recognized as administrative – territorial units (hereinafter - ATU) according to the existing administrative – territorial division. This study is pioneering; no similar assessments have been conducted before in Belarus.

The investigation has the following objectives:

- a) conduct the assessment of transparency level of ATU budgets in oblasts (regions) using a simplified methodology (snapshot assessment), covering 16 indicators (plus two qualitative criteria – the depth and relevance of the information provided), all indicators united in the “transparency index” (Online Local Budget Index of Transparency - OLBIT);
- b) find out what factors affect the transparency level measured by OLBIT;
- c) formulate recommendations for policy decisions, related to increasing the openness and transparency of local budgets in ATU.

The paper structured as follows: outlined the importance of the local budget in the local community; developed methodology and tools for assessing openness and transparency of local budgets online; analyzed budget information and defined results overall rating of openness and transparency of local budgets; gave an assessment of the efforts of the local authorities in the disclosure of budget information; tested hypothesis and determined the approaches to find the factors influencing the openness and transparency of budgets, presented recommendation through the results of our study for increasing the transparency of local budgets in Belarus.

2. A short literately observe

For the first time, financial transparency issues were raised by the ancient Athenians, who raised the issues connected between transparency, the prevention of corruption and the democracy development (Alt, J., 2019). Since the end of the 16th century, the topic of transparency has been "surfacing" in connection with the importance of accounting, auditing and auditing methods in economic development. However, this still did not arouse much scientific interest in the topic itself, the causes and consequences of fiscal transparency.

An important impetus for the development of scientific thought in the field of transparency was the study of Bengt Holmström in his article "Moral danger and observation" (Holmström, B., 1979). Later, aspects of transparency were addressed in Paolo Mauro's study "Corruption and Growth" (Mauro, P., 1995), which came close to the transparency toolkit by applying quantitative indicators of measurement and evaluation in the field of transparency, such as indices of corruption, amounts of bureaucracy, indicators of the effectiveness of the judiciary, the size of categories of political stability. However, these research findings have not yet provided sufficient scientific interest in the causes and consequences of transparency. Later the financial transparency researches were continued by Kopits, G. and Craig, J., In January 1998, George Copits and John Craig published an article entitled "Transparency in Government Operations" (Kopits, G. and Craig, J., 1998). They created a turning point in understanding financial transparency. Their argument was direct: the timely publication of a clearly presented budget document (i.e., transparency) allows the market to assess the intentions of the government and provides the key to compliance with market discipline by the government, despite the fact that this argument increased the political risks of functioning politicians in the context of managing an unstable economy. More generally, the authors' conclusions regarding increased financial transparency were that transparency would increase the governmental confidence. In support of this, the authors argued the influence of transparency on the macroeconomic activities improvement (such as indicators), arguing that this was a prerequisite for sustainability, responsibility, and the prevention of corruption.

G. Kopits and J. Craig study results were not long awaited, and during the same year Vito Tanzi published the article "Corruption around the world: causes, consequences, scope and medicines" (Tanzi, V., 1998), and a few months later, another article by William Easterly "When Financial Regulation is an Illusion" (Easterly, W., 1999) was published in May 1999, where the author reveals schemes for manipulating governments in estimating their budget deficit. These publications created a new impact for further empirical research in financial transparency area. In this year D. Ferejohn suggested the model that under some conditions transparency is a deterrent fiscal factor, while reducing the negative impact of tax increases. In other words, this meant that politicians could thus agree to a greater effort in transparency, receiving tax-based compensation in return than if the actions were completely hidden (Ferejohn, J., 1999).

A similar approach was used by J. Alt, D. Lassen, and D. Skilling in their empirical article, "Financial Transparency, Gubernatorial Popularity, and Government Scale: News from States," related to governors' approval of public opinion polling in the states of the United States (Alt, J., Lassen, D. and Skills, D., 2002). They collected nine indicators from published sources based on reviews of public servants and showed that the highest level of transparency was associated with higher government funding and higher governor approval ratings. Later, D. Alt, D. Lassen and S. Rose took up the causal conditionality of problems, collecting an interview-based retrospective group dataset for 30 years (from 1972 to 2002), which still remain in demand (Alt, J., Lassen, D. and Rose, S., 2006). These data showed quite interesting dependencies, namely, that political

competition was associated with greater transparency, and political radicalism was associated with lower transparency, in turn, financial instability was associated with increased transparency. In last decade a lot of publications that have been devoted to analyzing the local budgets transparency have been issued. Among them publications devoted budget information through the Internet were presented by D. Yannacopoulos and H. Darbyshire (Yannacopoulos et al., 2014, H. Darbyshire, 2010). The authors of these publications conclude that the development of the Internet has improved budget transparency by enabling the rapid and effective dissemination of information. Local authorities use this opportunity to ease public pressure and change their own way of communicating with citizens. There are many studies assessing local budget transparency in CEE countries: Ott et al (2006, 2018), Andronova et al (2018), Sedmihradská (2015). A contribution to the analysis of local fiscal transparency in Ukraine were presented by Demydenko & Nakonechna (2016), Slukhai et al (Слухай et al 2019).

Since the beginning of the new century, many economists have begun to search for factors that influence on changes in fiscal transparency. Such attempts made by J. Alt, J. D. Lassen, S. Rose, D Skilling (Alt et al 2002; Alt et al 2006), which noted the importance of institutional and financial factors. In the studies of A. Styles and M. Tennyson, the economic factors such as: the size of the municipality, population, per capita income, accounting disclosure, based on the analysis of financial reports of 300 US municipalities, were noted (Styles & Tennyson, 2007).

In the current decade, taking into account Internet and digitalization development, studies on openness and transparency have largely been based on the websites of communities, districts, and regions. Among those studies of E. Bernick, J. Birds, K. Brekken, A. Gourrier, and L. Kellogg, who noted the importance of socio-political factors: leader's level of education, size of powers, size of staff, level of unemployment, age of the population, political ratios in the population (Bernick et al., 2014). Geographic, demographic, socio-economic, and institutional factors have been the subject of new findings in the Ch. Lowatcharin and G. Menifield study (Lowatcharin & Menifield (2015). We also can find studies made by authors J. Gandía and M Lowatcharin & Menifield (2015) Lowatcharin & Menifield (2015) Archidona, who suggest approaches based on groupings of multiple factors for transparency index calculating (Gandía & Archidona (2008), Gandía et al (2016). Despite the updating of transparency research over the Internet, J. Alt cautions that information over the Internet is often provided less the possibility of verification Alt, J. (2019, p.11).

Summarizing the literary review in the fiscal transparency area, it can be noted that the research methodology focused on three consecutive stages: assessing the transparency measure through the index; creating a factor model that presents various institutional, political, economic, financial and social factors; interpretation of the results achieved. We tried to follow this sequence in our own study of the local budgets' openness and transparency in Belarus.

3. Methodology research

In recent years, the budget transparency assessment at the different levels in Belarus has become very relevant in connection with similar studies in Central and Eastern Europe, as well as in EaP countries. In 2017, a study of the public (state) budget's openness in Belarus conducted by the NGO "Sympa," which was the first pilot project in the budgetary openness and transparency area. Although Belarus was not included in the official Open Budget Survey (OBS) rating, the study was supported by the World Bank in accordance with the official methodology. As part of the assessment, budgetary processes and documents that implemented during 2017 were taken into account. Meanwhile, the assessment results showed that Belarus provided for the public scant budgetary information, scant opportunities for public participation in the budget process and that the legislative authority and the Supreme Audit Body provided a little budgetary supervision. It may be evidence that the level of the local budget transparency in Belarus as a whole is quite low.

Summarizing, we have to realize that the local budget transparency assessment takes only the first step, and the present study in this article is the first concrete initiative study of the NGO "Lev Sapieha Foundation" in local budget openness and transparency area in Belarus. However, it should be taken into account the study is not comprehensive, since it does not evaluate all budgets of all local units, and only the base level budgets (rayon and city local budgets, 128 units) (reference). A

comprehensive study of the local budget openness and transparency covering 1,173 lowest rural budgets will require some resources, efforts, and extensive funding, with the participation of international support.

At the same time, the initiative study provided by the NGO “Lev Sapieha Foundation” is aimed at eliminating the gap in the existing studies of openness and transparency in Belarus. This goal will be achieved by applying a simplified methodology for assessing the transparency of external budget transparency, which call “snapshot assessment”. This methodology has advantages over other ones: we do not need to complete questionnaires or directly monitor local authority’s activities; the only thing that is needed is their website and the information uploaded there.

Measures for assessment of local budget transparency were provided by the following 16 informational blocks on the official local authority’s website: availability of the economics section”; availability of local budget section or local finance one; socio-economic development program; local budget draft for the year; budget for citizens for the year; protocols of local budget hearings; approved annual budget and its comments (an official decision-making by the Local Council Deputies); annual performance report (an official decision-making by the local Council Deputies); the quarterly performance or semi year reports; statement of borrowing policy; information on borrowing and its execution; investment atlas or investment passport; information about current investment projects’ implementation for the year; budget program performance reports; reference on mass media by the topic of local budget and local finance (in newspapers and articles published by the administrative and territorial units). This list complies with OBP recommendations. Based on these indicators (unweighted amount), we get the OLBIT index for each individual administrative - territorial unit (ATU).

All six regions of Belarus for our analysis were selected: Brestskaya, Vitebskaya, Gomelskaya, Grodnenskaya, Minskaya, and Mogilevskay ones. They reflect various economic, social, and cultural models and various achievements in the local development. The total number of ATUs analyzed covered all 128 units, which seemed sufficient to draw conclusions on the general situation in Belarus' local budgets transparency. Each item, presented on the official website of ATU, was awarded one (1) point. So, the total ATE score may reach 16 at maximum; These measurements for all ATEs, in turn, are summed up to achieve common indicators by region. Transparency analysis data from official web resources of rayon and city authorities and official websites of regions were drawn.

After the OLBIT index calculation, the authority efforts in ensuring fiscal transparency were evaluated. After that the factors influencing transparency through paired correlation dependence were probed. These factors were divided into two groups i) financial factors, ii) territorial and demographic factors. Based on the results, we suggested some conclusions on what exactly could be done to make local ATE budgets in Belarus more transparent.

4. Methods for assessing online openness and transparency of local budgets

We tried to reveal the openness and transparency of the local budget process through the initiative survey of all 128 local authorities’ websites of the basic territorial level of Belarus in the period from November 20, 2019 to February 3, 2020.

For this purpose, preparatory work was carried out to develop criteria for openness and transparency of local budgets. The approaches and methods of different countries in their assessments were investigated. Our approach to assessing the transparency of budget systems based on the open budget index (OBI), which is compiled by the International Budget Partnership (IBP)³ (IBP, 2017. pp. 48-50). We tried to identify the indicators based on the information blocks of official OBI evaluations, namely: (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

³ Examples of other assessments include research on transparency in the company's fiscal sphere Oxford Analytica and Index of financial standards of non-profit The Financial Standards Foundation, as well as the project “Index of openness of local budgets” URL: <http://budget.kz/indexs-otkrytosti-mestnykh-byudzhetrov/> (accessed: 18.01.2020)

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 assessed not only information directly related to the budget, but also issues related to the development of local territories, such as the availability of programs for socio-economic development of the territory, borrowing policies, implementation of investment projects, and others.

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) X_1 - Section “Economics”; 2) X_2 - Separate Section “Budget (and/or Finance)”; 3) X_3 - Program of Socio-Economic Development of the Territory; 4) X_4 - Project Budget; 5) X_5 - Citizens Budget; 6) X_6 - Protocols of Public Hearings on Budgeting; 7) X_7 - Adopted Decisions Approving Budget for the Current Year; 8) X_8 - Decisions on Approval of the Report on the Annual Budget Execution; 9) X_9 - Quarterly, (Semi-Annual) Reports on the Budget Execution; 10) X_{10} - Statement on Borrowing Policy; 11) X_{11} - Information About Current Borrowings and Repayments; 12) X_{12} - Information “Investment Atlas” (“Investment Passport of District”); 13) X_{13} - Information on the Implementation of Current Investment Projects; 14) X_{14} - Report on Execution of Budget Programs; 15) X_{15} - Feedback Interface (ability to write a query or appeal); 16) X_{16} - Articles (Informational Messages) on Local Budget in Local Media.

We evaluated the fact that this section is included in the structure of the site and any information relevant to this topic, in particular. The availability of relevant information on the website of local government was rated at 1, and its absence - 0. Thus, the criterion of compliance of OLBIT indicators for any ATU can be in the range from 0 to 16.

As a result of collecting the above-mentioned information, we have obtained general picture of the situation with the availability of information on sites of local self-government in all 128 ATU (local budgets at the basic level) covered by our investigation (see Figure 1).

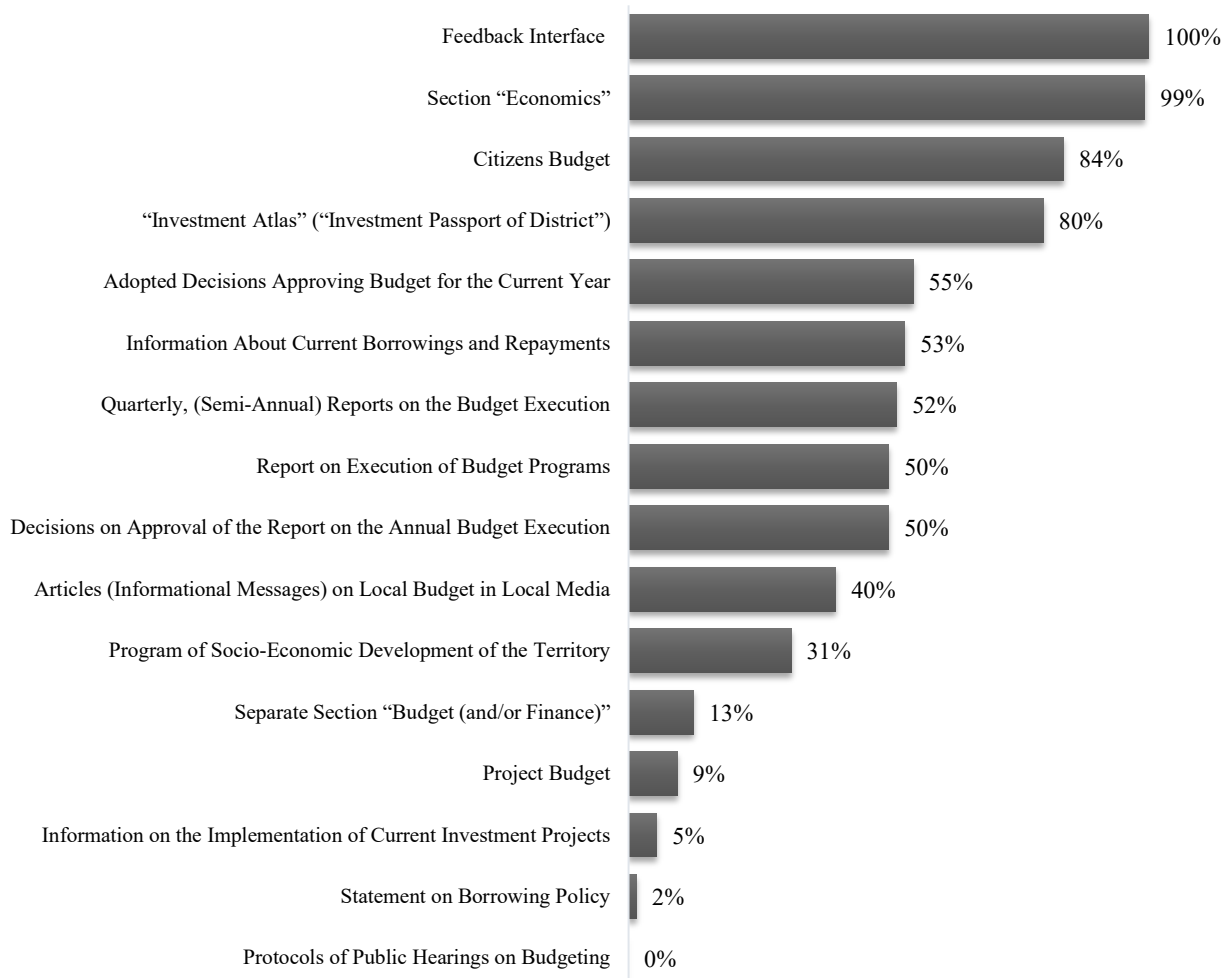


Figure 1. Structure of Information Content of Official Websites of ATU of the Republic of Belarus, (percentage)

Source: Compiled by the authors.

As we can see, absolutely all sites have a feedback interface, which means that users can communicate and get the necessary information. This is corresponding to the current legislation on the appeal of citizens. The vast majority of sites have “Economy” section (or similar in name and content). The innovation of recent years – “Citizens Budget” also spreaded widely. However, the placement of this information is not always obvious. For example, information about the participation budget can most often be placed in the section “Economy” or “Official documents”, while sometimes this information landed in the section “Structural divisions” → “Finance Department”. In rare cases, this information could be found in the section “About rayon (city)”. Among original places where information about the citizens budget you can find is section “Business” (Nesvizh), “Social sphere” (Tolochin).

Information about the district's investment opportunities is also very good presented on the web. Almost 80% of websites have section called “Investment Atlas” or “Investment passport”. On the other hand, information about the implementation of current investment projects can be found only in 5% of cases. There is no information at all about budget hearings (minutes of such meetings), if they happen at all.

The following graph shows data on evaluating the significance of information available on the site. This estimation is obtained based on experts’ surveys and ranking of their ratings (see more details in table 2, table 3).

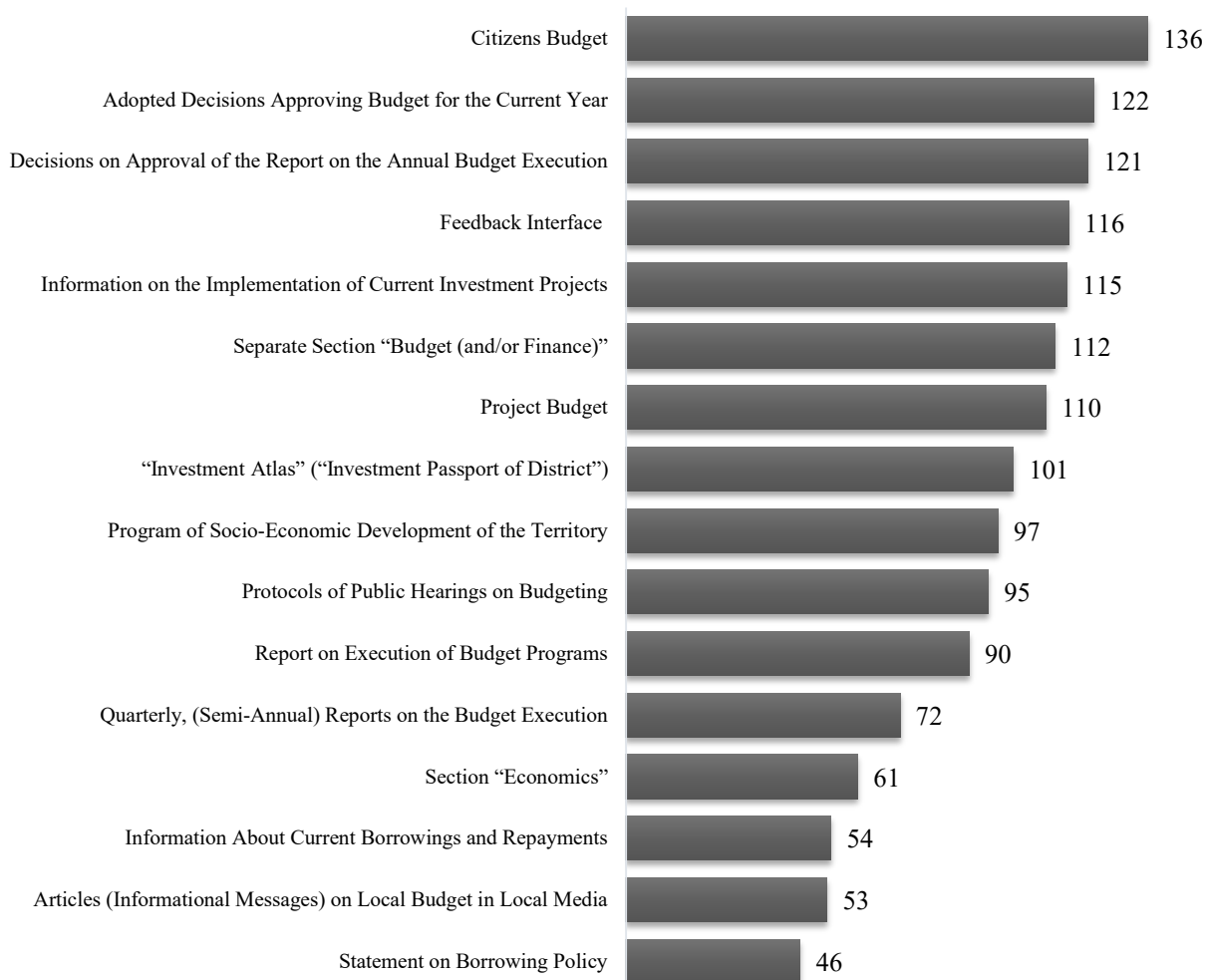


Figure 2. Budget Transparency Indicators Ranked by the Sum of Expert Assessment Points

Source: Compiled by the authors (see Table 2).

The indicators that are best represented on the websites of district administrations are highlighted. According to experts the most important thing for the transparency of the budget process is the

“Citizens Budget”. Behind them in terms of significance, experts identified the approved annual budget and its implementation report, which in practice are presented on the sites only in half of cases. Experts also consider the presence of feedback interface significant. But the following significant indicators: information about the implementation of investment projects, section “Budget and Finance”, and the draft budget are very poorly represented on the sites by 5%, 9% and 13 % respectively.

In addition to this part of the assessment we added information blocks related to the depth and relevance of budget information on the sites. 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.

The pull of experts counts 11 personalities who represents public servants, academicians and NGOs. They have assessed all 16 information indicators according to the degree of importance of budget information for the population on a 10-point system as follows (see table 1).

Table 2 Expert assessment of budget information indicators

Estimated Indicators	Average score	Experts*:										
		1	2	3	4	5	6	7	8	9	10	11
x ₁	6,2	8	5	6	7	2	1	9	4	8	9	4
x ₂	8,0	8	10	9	9	5	7	8	3	10	9	10
x ₃	7,5	10	8	8	8	5	8	10	3	10	7	5
x ₄	7,7	9	10	9	4	7	8	10	3	8	9	8
x ₅	8,8	10	10	10	10	10	8	10	3	8	8	10
x ₆	7,5	8	9	8	6	8	8	7	1	9	10	9
x ₇	8,5	10	10	10	9	9	1	10	4	9	7	7
x ₈	8,2	10	9	9	8	9	6	10	4	8	9	8
x ₉	6,3	9	9	8	1	6	7	10	3	5	5	6
x ₁₀	5,9	8	7	7	6	5	5	7	3	5	7	5
x ₁₁	6,1	8	5	6	7	7	6	7	3	5	7	6
x ₁₂	7,2	10	5	8	9	5	8	7	5	9	8	8
x ₁₃	7,9	10	6	9	8	6	8	8	6	9	8	9
x ₁₄	7,3	10	8	9	8	5	8	9	3	8	7	5
x ₁₅	7,6	10	10	10	5	3	9	10	3	10	9	5
x ₁₆	5,9	8	8	8	2	4	6	8	3	7	8	3

* The assessment was carried out on 10-point scale (1 - not significant to 10 – the most significant criterion).

Source: Compiled by the authors.

The experts assessed the significance of the parameters by assigning them points. The factor that the expert gives the highest rating is awarded 10 points. If the expert recognizes several factors as equal, they are assigned the same score. Since the questionnaire table contains related ranks (identical scores) in the ratings of all experts, we performed their reformulation. Ranks are reformed without changing the expert's opinion, meaning that the corresponding ratios (greater, less, or equal) must remain between the rank numbers. New ranking matrix was constructed based on reformulation of the questionnaire data.

Table 2 Matrix of the transformed ranks of the expert assessment

Indicators / Experts	1	2	3	4	5	6	7	8	9	10	11	Sum of ranks	d	d ²	Indicators weighting
x ₁	3.5	2	1.5	7.5	1	1.5	8.5	13	7	13	2	60.5	-33	1089	4,0%
x ₂	3.5	14	11	14	6	7.5	6	6.5	15	13	15.5	112	18.5	342.25	7,5%
x ₃	12.5	7	6	10.5	6	12	13	6.5	15	4	4.5	97	3.5	12.25	6,5%
x ₄	7.5	14	11	3	11.5	12	13	6.5	7	13	11	109.5	16	256	7,3%
x ₅	12.5	14	15	16	16	12	13	6.5	7	8.5	15.5	136	42.5	1806.25	9,1%
x ₆	3.5	10	6	5.5	13	12	2.5	1	11.5	16	13.5	94.5	1	1	6,3%
x ₇	12.5	14	15	14	14.5	1.5	13	13	11.5	4	9	122	28.5	812.25	8,2%
x ₈	12.5	10	11	10.5	14.5	5	13	13	7	13	11	120.5	27	729	8,1%
x ₉	7.5	10	6	1	9.5	7.5	13	6.5	2	1	7.5	71.5	-22	484	4,8%
x ₁₀	3.5	5	3	5.5	6	3	2.5	6.5	2	4	4.5	45.5	-48	2304	3,0%
x ₁₁	3.5	2	1.5	7.5	11.5	5	2.5	6.5	2	4	7.5	53.5	-40	1600	3,6%

x ₁₂	12.5	2	6	14	6	12	2.5	15	11.5	8.5	11	101	7.5	56.25	6,8%
x ₁₃	12.5	4	11	10.5	9.5	12	6	16	11.5	8.5	13.5	115	21.5	462.25	7,7%
x ₁₄	12.5	7	11	10.5	6	12	8.5	6.5	7	4	4.5	89.5	-4	16	6,0%
x ₁₅	12.5	14	15	4	2	16	13	6.5	15	13	4.5	115.5	22	484	7,7%
x ₁₆	3.5	7	6	2	3	5	6	6.5	4	8.5	1	52.5	-41	1681	3,4%
∑	136	136	136	136	136	136	136	136	136	136	136	1496		12135.5	

Source: Compiled by the authors.

Table 3 Ranked expert assessments of significance and weight of indicators for assessing the openness and transparency of local budgets

#	Indicators, (K _i)	Average ranked score, (B _i)	Weight indicators, (Y _i)
1.	Section "Economics"	5,50	4,0%
2.	Separate Section "Budget (and/or Finance)"	10,18	7,5%
3.	Program of Socio-Economic Development of the Territory	8,82	6,5%
4.	Project Budget	9,95	7,3%
5.	Citizens Budget	12,36	9,1%
6.	Protocols of Public Hearings on Budgeting	8,59	6,3%
7.	Adopted Decisions Approving Budget for the Current Year	11,09	8,2%
8.	Decisions on Approval of the Report on the Annual Budget Execution	10,95	8,1%
9.	Quarterly, (Semi-Annual) Reports on the Budget Execution	6,50	4,8%
10.	Statement on Borrowing Policy	4,14	3,0%
11.	Information About Current Borrowings and Repayments	4,86	3,6%
12.	"Investment Atlas" ("Investment Passport of District")	9,18	6,8%
13.	Information on the Implementation of Current Investment Projects	10,45	7,7%
14.	Report on Execution of Budget Programs	8,14	6,0%
15.	Feedback Interface	10,50	7,7%
16.	Articles (Informational Messages) on Local Budget in Local Media	4,77	3,5%

Source: Compiled by the authors.

We modeled two indicators to assess the openness and transparency of local budgets:

- 1) the level of transparency of local budgets (OLBIT)
- 2) authorities' efforts to ensure transparency of local budgets

The model for assessing the level of transparency of local budgets is based on the use of criteria for compliance of information support (K_i) and the average value of the ranked scores of expert evaluations (B_i), as follows:

$$B_{main} = \sum_{i=1}^{16} B_i \times K_i \quad (8)$$

where, B_{main} – the sum of points of the main rating of openness and transparency of local budgets;

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

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

In addition to the main assessment of the availability of information, we also assessed indirect parameters of the informative content and relevance of budget information on the ATE sites. The data was evaluated without the participation 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. The degree of relevance of budget information (more up-to-date and frequent publications is better) is evaluated according to the periodicity and the latest publication was: less than 1 month – get 10 points, 2-3 months-7.5 points, 3-6 months - 5 points and more than 6 months -2.5 points.

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

$$B_{depth} = k_{4years} \times 10 + k_{3years} \times 7.5 + k_{2years} \times 5 + k_{1year} \times 2.5 \quad (9)$$

where, B_{depth} - 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:

$$B_{relev} = z_{1\ month} \times 10 + z_{3\ months} \times 7.5 + z_{6\ months} \times 5 + z_{>6\ months} \times 2.5 \quad (10)$$

where, B_{relev} - 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:

$$B_{\text{total}} = B_{\text{main}} + B_{\text{depth}} + B_{\text{relev}} \quad (11)$$

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 (K_i) and indicator of the weight of these criteria (Y_i):

$$Y_{\text{main}} = \sum_{i=1}^{16} Y_i \times K_i \quad (12)$$

where, Y_{main} - assessment of authorities' efforts to ensure transparency of local budgets;

Y_i - indicator of the weight of openness and transparency of local budgets of factor i ;

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

We assessed the indirect parameters of informative content and relevance of budget information on the sites of the ATU by analogy with the score-based assessment of transparency of local budgets. However instead of a 10-point scale, weighted values in percentages were used, i.e. the time range: for 4 years or more get 10 %, for 3 years-7.5%, for 2 years – 5%, for 1 year – 2.5%. The assessment of relevance of budget information was as follows: less than 1 month – 10%, 2-3 months – 7.5%, 3-6 months –5% and more than 6 months -2.5%.

The final value of the authorities' efforts to ensure transparency of local budgets consists of all three elements:

$$Y_{\text{total}} = Y_{\text{main}} + Y_{\text{depth}} + Y_{\text{relev}} \quad (13)$$

5. Results

5.1 Assessment of the openness and transparency of the local budget process (OLBIT index)

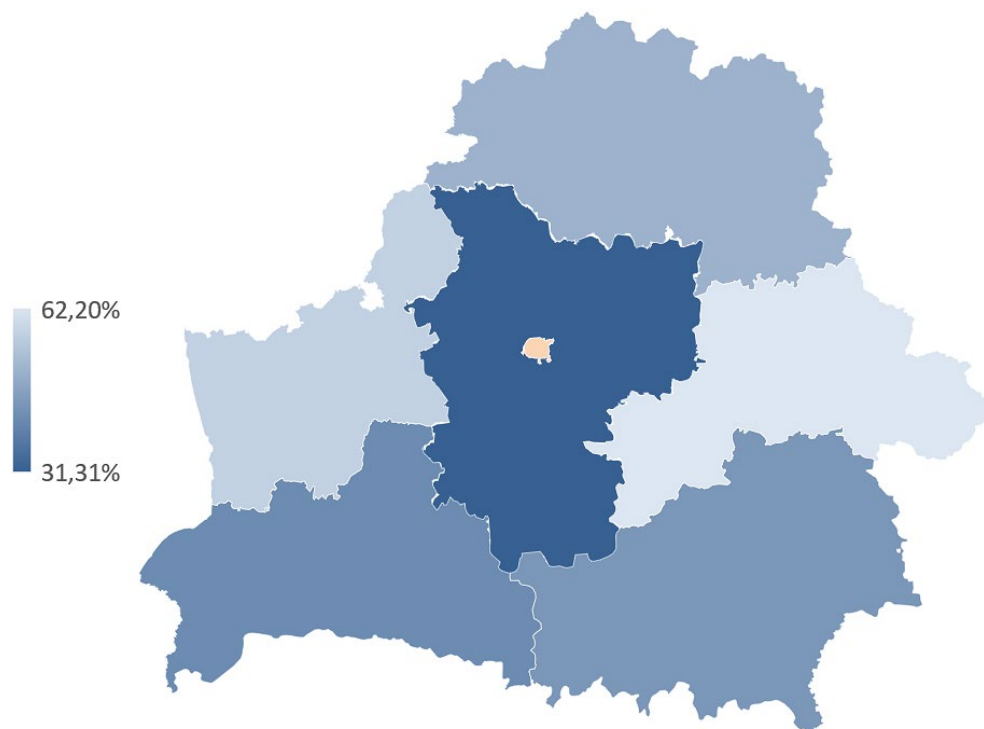
What the openness and transparency of online information about the budget and local finance for the local community have shown? Before proceeding to aggregate and regional evaluation, the general information presented in Graph 3 should be considered. It demonstrates still insufficient level of fiscal transparency in all of Belarus's ATU.

According to a number of criteria, the actual level of disclosure budget information provided by local governments was quite low.

There are some areas where budget information posted on ATU sites was absolutely inadequate. Information on local authorities' statements on borrowing policies, implementation of current investment projects, budget drafts for discussion and budget hearings with the participation of citizen representatives, discussions regarding the annual budget were especially scarce. The scarcity of information on the forthcoming loans on the local authority's websites could be explained partly with lack of acting in this sphere, but the Ministry of Finance's bulletin (Bulletin about local budgets execution, 2019⁴) evidenced the opposite – an active borrowing policy of almost all local authorities, where each local government had the debt on different budgetary credits, loans, bonds. Moreover, its size in some ATU tends to grow.

Figure 3. OLBIT Heat map (regional-level) of the Republic of Belarus.

⁴ Бюллетень об исполнении местных бюджетов за 2019 год. <http://www.minfin.gov.by/upload/bp/bulletin/2019/2019.pdf>



Source: Compiled by the authors

We can also observe some (even small) investment projects initiated by the population and local authorities, and financed from the local budget (for example, the construction of local roads, building repairs, etc.), for which the local Council should be accountable. At the same time, information about its expenses should be made public. The Ministry of Finance's and regional executive committees also provide information on current investment projects, but most often it remains undisclosed for the citizens at the ATU sites where these projects are implemented. It appears that local authorities are not willing to provide information on budget drafts and discussions regarding the ATU annual budget. All ATU have a feedback interface and citizens can appeal in the form of electronic request. The approved annual budget, the report on the annual budget execution, quarterly and semi-annual reports in all ATUs are presented slightly better, however they are around middle score of openness and transparency. The assessment of the openness and transparency of local budgets at the basic territorial level (ATU) by the oblasts is presented in table 4.

Table 4 The level of transparency of the local budgets of ATU by the regions.

Oblasts/Regions	Number of matches in monitoring indicators, (K_i)	Local budget transparency score, (B_i)	Potential local budget transparency score, (B_{max})	Transparency level of local budgets, B_i / B_{max}
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: Data calculated by the authors on the base of research results

The aggregate index, that measures the disclosure of information about local budgets shows that we get on average 43.7% of the expected information on local budgets within the 100% possible. In our opinion it demonstrates insufficient level of budgetary transparency of local budgets in all ATUs of Belarus. The highest OLBIT index was reached by the budgets of the Mogilev region - 62.92%, the Grodno region 57.52%, and the Vitebsk region - 51.04%. The lowest value in openness and transparency were received by the budgets of Gomel region - 44.09%, Brest region 42.19%, and

Minsk region - 32.31%. Overall, the transparency and openness of all base-level ATU budgets are illustrated by the figure 4.

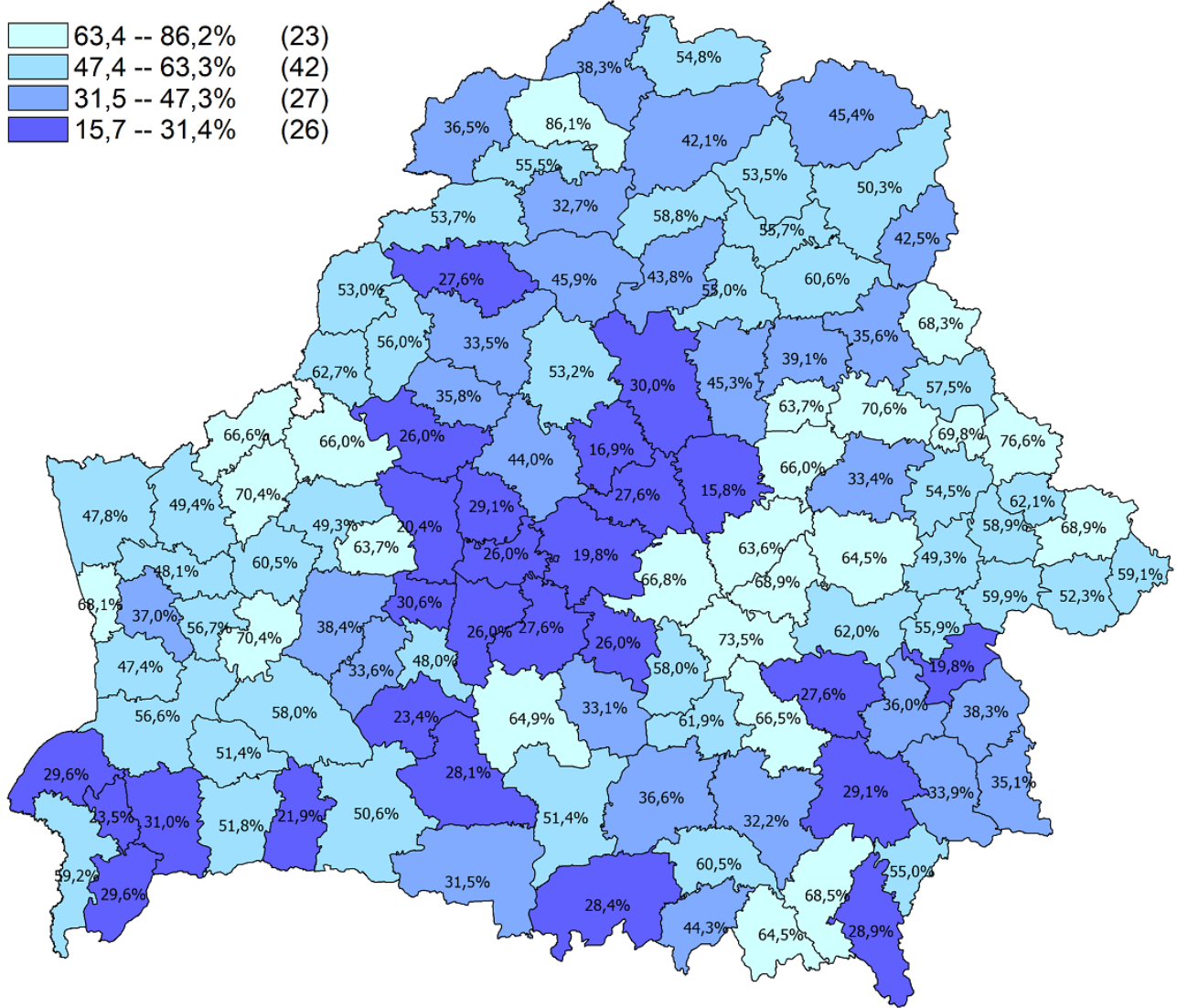


Figure 4. OLBIT Heat map on the basic territorial level of Belarus.
Source: Compiled by the authors

The most open and transparent local budgets were identified in the study process. Among the leaders were: the Miorsky rayon of the Vitebsk region - 86.1% out of 100% (140.82 points), the Mstislavsky rayon 76.6% (125.18 points), the Bobruisk city and Mogilev one 75% (122.64) and 74.2% (121.32), respectively, Bobruisk rayon and the of Baranovichi city get the same 73.5% (120.20), Shklovsky rayon 70,6% (115,36), Lida and Slonim rayon 70,4% (115,18). At the end of list with transparency indicators less than 20% are Chechersky, Pukhovichsky, Smolevichsky, and Berezinsky rayons. Grouping local budgets by transparency ranges showed that out of 128 local budgets, 23 get the maximum transparency range from 63.4% to 86.2%; 42 rayons in the range from 47.4% to 63.3%; 27 rayons in the range from 31.5% to 47.3%; and finally 26 rayons get the minimal transparency range from 15.7% to 31.4%. Especially should be mentioned specific results of assessments that the level of local budget transparency in urban ATU was 10.6 percentage points higher than in rural ones. Thus, the average value of the local budget transparency index in cities was 57.6%, and in rural areas 47.0%.

5.2 Assessment of the authorities’ efforts to achieve openness and transparency

The data provided on the overall state of local budgets openness and transparency and the leaders and laggards in this area does not yet answer the question about the extent of local authorities’ efforts to achieve openness and transparency.

For this purpose, we assessed the degree of openness and transparency of online information about the local budget, taking into account the weighting indicators (Y_i) for all information blocks (evaluation criteria). Thus, in contrast to the score-rating assessment of experts, this indicator initially has a relative value and shows the degree of information saturation of the ATU sites on the local budget topic. Therefore, we interpret this assessment as the authority's efforts to ensure openness and transparency of local budgets, since it takes into account only the presence/absence of the relevant information factor, as well as its weight value, and does not take into account the sum of experts estimated points.

Table 5. The level of authority's efforts to ensure openness and transparency of ATU local budgets by the regions.

Oblasts/Regions	Authorities' efforts to ensure transparency of local budgets, (Y_i)	The ratio of authority efforts to ensure transparency of local budgets, ($Y_i / Y_{average}$)	Local budget transparency rating points of authorities' efforts, (B_i^{auth})	Local budgets transparency level ensured by authorities' efforts, B_i^{auth} / B_{max}
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: Data calculated by the authors on the base of research results

The assessment results of authorities in their efforts to ensure the disclosure of budget information are characterized by the following figure 5. According to the data, the authority's efforts in disclosing budget information, expressed in points, do not always correspond to openness and transparency degree of local budgets of OLBIT index. The gap between the efforts of the authorities and the achieved level of openness achieved is greater in lagging regions. So, the gap in the leader of OLBIT index Mogilev region is 10%, while Minsk region exceeds 17%. It turns out that compliance with formal approaches in filling up websites with budget information is cheaper (easier) for local authorities, while efforts to increase awareness do not bring the same increase in openness and transparency indicators of local budgets. This situation certainly does not motivate the local government to be more open.

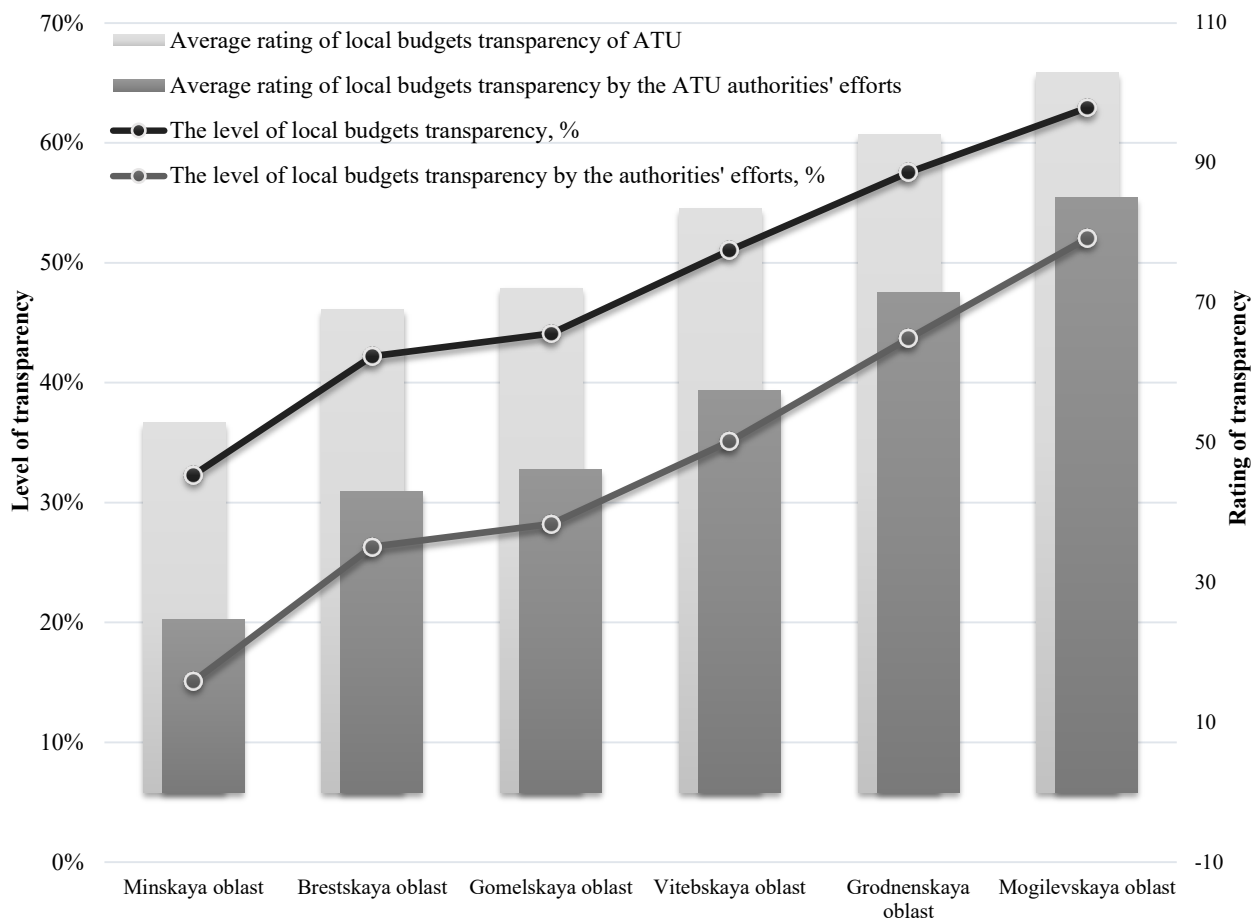


Figure 5. The ratio of authorities' efforts in disclosure of budget information and OLBIT by regions.

Source: Data calculated by the authors on the base of research results

The distribution of efforts to disclose budget information to ensure the openness and transparency of local budgets for each of the regions is made relatively to the average Republic value, that allowed ranking the coefficient of authorities' efforts. It essentially shows the relative productivity of all ATU in each region, as illustrated in figure 6.

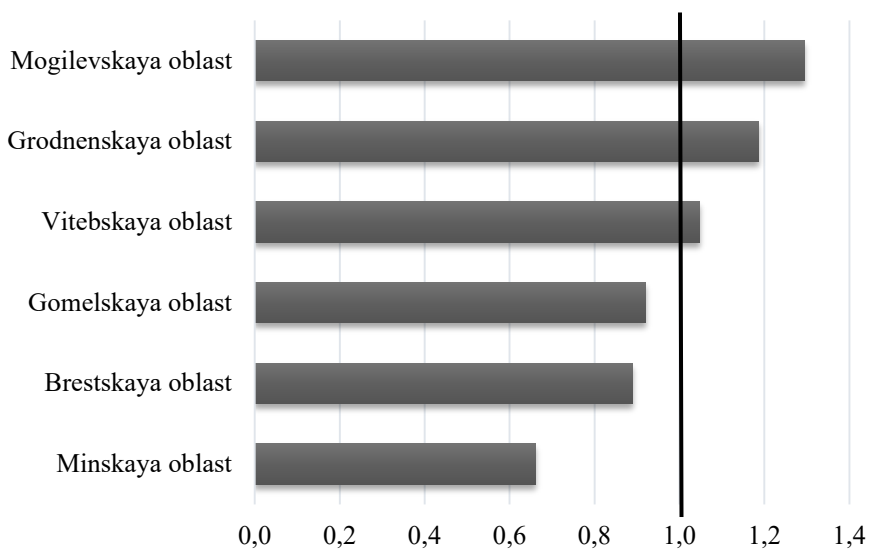


Figure 6. Authorities' efforts coefficient to ensure transparency of local budgets

Source: Data calculated by the authors on the base of research results

If we take the average coefficient of the authorities' efforts for 1, then the leader became Mogilev region - 1,3, slightly less is the coefficient of Grodno region - 1,19, Vitebsk region - 1,05. The efforts of the authorities in Gomel, Brest and Minsk to ensure openness and transparency of local

budgets were less than average - 0,92; 0,89; 0,66 accordingly, which can be considered as insufficient.

5.3 Identification of factors for openness and transparency of local budgets in Belarus

The identification of factors affecting the transparency of budget information is an important step in the research of many authors on the motivation for transparency of financial information (Guillamón, 2011; Stanic, 2018; Ribeiro, 2017; Tavares, 2014). Empirical studies show that there is a direct link between the level of economic development and the profitability of countries and the degree of openness and transparency of their financial information. Although exceptions of it happened. A good example is the OECD countries, where the level of transparency of financial information recorded by official surveys was high compared to underdeveloped and developing countries. Taking into account this pattern, we tested the hypothesis regarding the influence of financial factors on the degree of openness and transparency of local budgets, namely: the share of own revenues in the total local budget revenues; total local budget revenues, per capita revenues, and per capita own revenues.

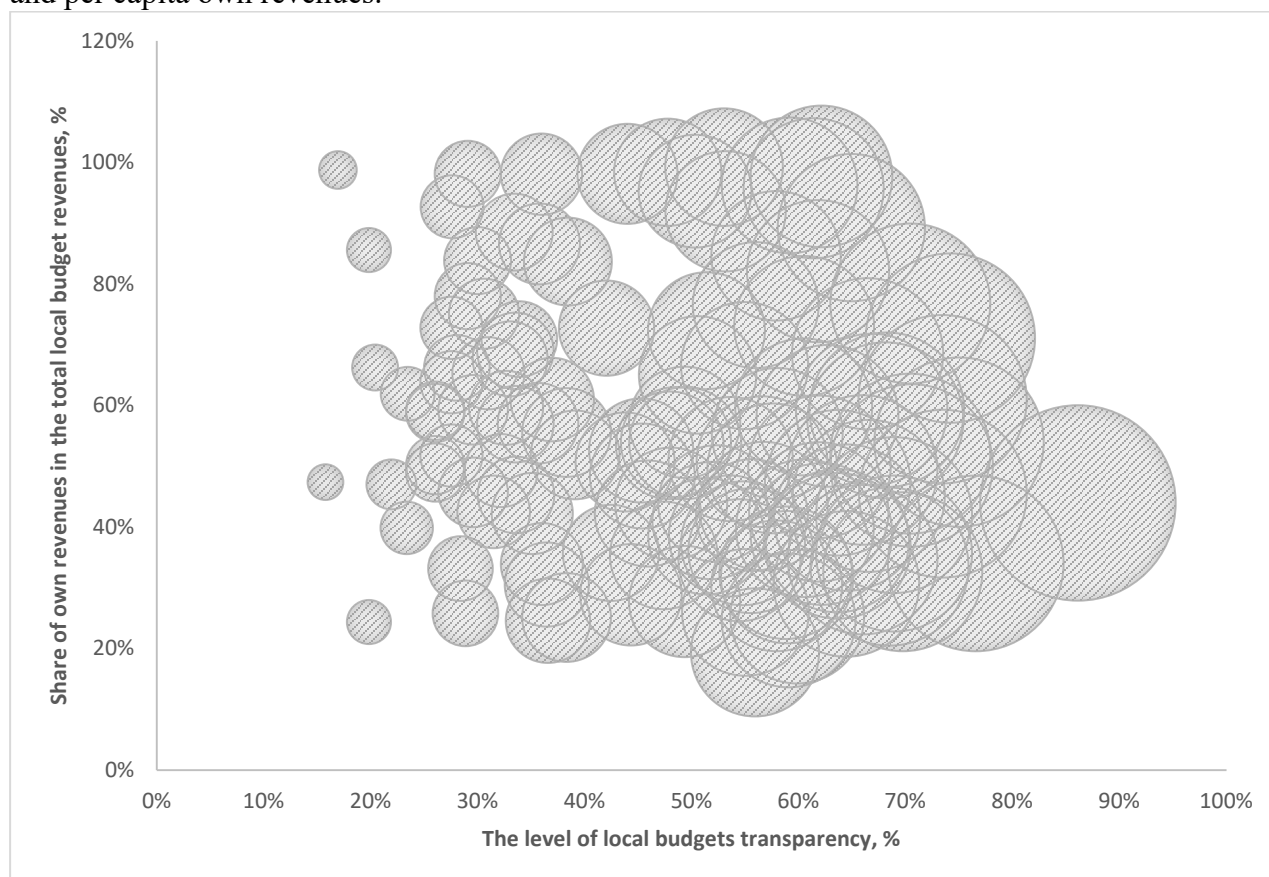


Figure 5. Correlation between the share of own revenues and OLBIT

Source: Data calculated by the authors on the base of research results

The size of figures in the bubble diagram reflects the level of local budgets' transparency provided by the local authorities' efforts. The results of correlation-regression analysis on financial factors showed the absence of any strong significant links and dependencies with financial indicators. The correlation coefficient for these factors, in this case, did not exceed the values of 0.05958 for direct links and -0.2165 for inverse one. Whole calculation presented in following table 6.

Table 6. Correlation coefficient on financial factors

ATUs	Coefficient of correlation by financial factors			
	The share of own budget revenue	Total budget revenue	Own budget revenue per capita	Total budget revenue per capita
All ATUs	-0,1766	0,0218	-0,2165	-0,0060
Urban ATUs	-0.2700	0.0050	-0.2546	0.1012
Rayon ATUs	-0.2431	-0,1849	-0.2217	0.0015
Brestskaya oblast	0.4165	0.5037	0.1724	-0.5148
Vitebskaya oblast	0.0113	-0.1695	-0.0338	-0.0319

Gomelskaya oblast	0.0963	-0.1622	-0.0391	-0.0140
Grodnenskaya oblast	0.0881	0.0965	-0.1922	-0.1645
Minskaya oblast	0.2626	0,3696	0.0884	-0.0254
Mogilevskaya oblast	-0,1263	-0,18736	-0,3859	-0,2575

Source: Data calculated by the authors on the base of research results

However, the "probing" of these links in regional context showed a somewhat noticeable reaction of openness and transparency to the total budget revenues and own revenues share in all budget revenues in the Brest region, where the correlation coefficient reached 0.5037 and 0.4165, accordingly. At the same time, the factor of total budget revenue per capita showed an inverse dependence (-0.5148).

It is noteworthy that when conducting analysis by the regional context, we are getting more diversity without any similarity to the total picture. In the leading regions of transparency are Mogilev, Grodno, Vitebsk (they are on the right side on graph 6). The links between the indicators of transparency level and capacity of local budgets to cover expenditures by own revenues turned out to be insignificant and weakly negative. At the same time, the result in these oblasts was distributed very densely that indicates a large uniformity in these indicators for the region. While in the outsider regions of the transparency rating - Minsk, Brest and Gomel there are wide spread of values for separate ATU within the region. Another interesting feature in these oblasts was weak, but still positive links between the level of transparency indicators and the capacity of own revenues to cover local budget expenditures. Of course, the discovered links do not confirm the hypothesis in the whole country, but they leave the prospect for an in-depth analysis in terms of regions in the future.

Totally summarizing, it can be concluded that the hypothesis of the dependence of openness and transparency from financial indicators has not been confirmed. The hypothesis of the influence of territorial - demographic factors, such as population size, area, population density on the level of budget information disclosure was not confirmed, as well. As an exception of general trend, we may note Brest oblast, where a noticeable tightness links between the population (0.4889) and the population density per resident was found out (0.4701).

Table 7. Correlation coefficient by geographical and demographic factors

ATUs	Correlation coefficient by geographical and demographic factors		
	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: Data calculated by the authors on the base of research results

However, these results still do not give grounds to assert that there are significant linkages between demographic and territorial factors and the degree of openness and transparency of local budgets.

The only result that can lead us to further search for factors that motivate the openness and transparency of budgets appeared differences in the level of budget information disclosure in cities of regional subordination and rural areas. The only specific feature was the transparency level of local budgets in urban ATU 10.6 percentage points higher than in rural ones. Thus, the average transparency index of local budgets was 47.0%, and in cities - 57.6%. The existence of such discrepancies poses a number of hypotheses related to the socio-political factors. First of all, it is educational background, the availability of competent scientists and specialists, civil society institutions and their activity, proactive and active groups of the citizens. They could serve as drivers in ensuring budgetary awareness of population. Confirmation of these hypotheses should be our next step in the study of openness and transparency of local budgets. However, we should not forget that there are objectively restraining factors in this field: limited opportunities for civic

participation, the lack of real local self-government, a rigid system of vertical power that noted by a number of studies of civil society institutions.

6. Discussion issues concerning local budget openness and transparency in Belarus

The study proves once again, that the system of local budgets has not changed significantly since the collapse of the former Soviet Union. Philosophy and the classical understanding of the role and significance of local budgets remained the same for citizens. In the minds of people, they appear as budgets subordinate to the higher state budget, and despite the fact that they are called local, they act as branches of the state budget in localities.

The importance of the local budget is significantly undermined by its lack of visibility and legibility on local government websites. The budget heading, as an important document for citizens, has never received an independent section due to the importance of other sections of information. Budget information were often landed in economy or social block, in the structure of the Financial Department of Executive Committee, and appeared in other non-core budget information blocks or even dropped out of view. This caused extra effort to search using special search options. On some of ATU websites, the links on official budget approval documents and performance reports were forwarded to legal portal sites instead of being available on their own sites that brings sometimes difficulties in access. As a result, the current haphazard, scattered and disordered budget information creates the impression of secondary importance of budget topics for the local community and negates the significance of this document.

The study showed that the level of centralization in local financial management remains quite high, and the degree of local government autonomy in local budget process is extremely low. These conclusions are not the result of the authors' hypothetical arguments but proceed from the budgetary information presented on the local authority websites. It is enough to mention the phrase often found on the websites of many regional and local executive committees, which notes 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 socio-economic plan, but not on the specific spending needs of local government. With this understanding of the local budget, it becomes clear that local budget planning is an administrative procedure in the budget hierarchy of the Ministry of Finance, which has been handed over to the local authorities for execution. In these circumstances, it is difficult to imagine that the local budget can be "our" - really own and independent budget for citizens of local communities.

Regarding the open budgets' issues, we found that there were no budget hearings and discussions of draft budgets involving active citizen groups, despite their participation in discussions on the environment, industrial and agricultural facilities, urban planning, and other issues of public concern. Thus, two-pronged opinion has been formed: either it is people's indifference to the local budget, or it is institutional and legal obstacles for public control.

Meanwhile, according to the Belarusian Law on Local Government and Self-Government (article 15, point 3.8) the citizens' participation in the session is mandatory (when introducing a draft decision of the Council) or may be considered necessary in other cases by decision of the Presidium of the Council (Law on Local government and Self-government, 2010). The persistence of this issue in localities can create serious problems with the openness and transparency of local budgets.

Finally, the quality of budget information. We have found great contrasts in the completeness and depth of information provided about the local budget. In many ATU, budget information (including the budget for citizens) was limited only to line-by-line data on income and expenditures. Disclosure of information about borrowings and their purposes is extremely limited. The same can be noted with regard to how and to what extent budget programs and subprograms were implemented, because of only limited number of ATUs have reported data. The fragmentation is main characteristic feature of budget information presented on the websites. You could find examples where information about the budget was offered on the websites of the regional Executive Committee or the Ministry of Finance. At the same time, we found good examples of the depth and quality of the budget information provided. Moreover, this examples out of the primary-level

ATUs, where the quality and completeness of providing budget information was much higher and more than on upper level of local rayon authorities.

Summarizing, we may conclude that the Belarusian system of local finance and budgeting is in developing phase in the phase of becoming their own independence in the field of Public Finance. The first steps it takes on this path are related to the representation of this sphere in the information space. And if earlier the prevalence of traditional channels of information allowed shadowing in local small mass media or being generally limited to the tools of citizens' appeals, the modern information society does not allow this to be done. The level of budget information transparency (the quality and volume of information about local budgets and finances) becomes an important criterion for assessing the appropriate level of public management and good governance. As our research has shown, there is no positive link between the level of online openness of local budgets and key financial and socio-demographic factors. We tend to attribute these results to the initial stage of becoming public the local finances transparency study. Following the line of this process developing we guess we will manage to trace the evolution of local finance publicity in Belarus. Such studies also will allow finding out the weaknesses and objectively assess the quality and volume of the local budget and finance information presented online, which is an important factor in public relations (PR) and the local community development.

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