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REVENUES OF RURAL MUNICIPALITIES AS AN INSTRUMENT FOR INCREASING FINANCIAL AUTONOMY

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Introduction

The issue of revenue generation and financial autonomy is one of the greatest challenges in the local governance domain. Solid financial resources in the rural municipalities are the basis of their social and economic development on the local level. The revenues at the disposal of the rural municipalities not only determine the socioeconomic development in the rural areas, implementation of the regional policy goals, but also reveal the situation of financial autonomy. Therefore, it is important to have a balanced combination of revenues consisting of own revenues and transfers of a share in the local governance unit (LGU) revenue structure, and the ability of rural municipalities to implement the local social and economic development goals by increasing the revenues.

Researchers, practitioners, and supranational organizations have been discussing on various LGU revenue assessment issues: revenue classification differences, own revenue sources and their definition,empowerment of revenues as a fiscal policy instrument to increase the FA, assessment of financial autonomy from the revenue perspective. Identification and assessment of the revenues that could be viewed as a potential for FA is a serious scientific and practical issue.

This topic has been elaborated from the rural municipality FA perspective by the researchers (A. Standar & Kozera, 2019; Friedrich et al., 2004; Satoła, 2018; Standar, 2019; Miceikienė et al., 2021; Kopańska, 2017; Wichowska, 2021; Satoła, Standar, Kozera, 2019; Ben-Caleb et al., 2021) who focus on explanation and assessment of the revenue indicators that reflect various aspects of the FA of municipalities. Researchers (Shah, 1994; Beer-Tóth, 2009; Kozera, Luczak, Wysocki, 2017; Glowicka-Woloszyn, Satola, 2018; Satola et al, 2019) were found to describe and employ different revenue indicators and formulas for FA assessment of LGUs. Hence, an integrated TOPSIS method that encompasses the indicators referred to by individual researchers was employed to address the issue and its results revealed the FA of the rural municipalities analyzed.

Research problem: which revenue indicators are employed for FA assessment of the rural municipalities and what are the possibilities for FA improvement in the rural municipalities? *Research aim:* to assess the revenues of rural municipalities as an instrument for FA improvement using the case of Lithuania. *Research methods:* scientific literature analysis, TOPSIS method, descriptive statistics methods.

Theoretical and empirical substantiation of the topic

In economic terms, revenue autonomy is the possibility to create the revenue flows and influence the revenue structure and value according to the mandate provided by the legislation (Wichowska, 2021).

Scientific literature propose diverse classifications of the municipal revenue sources. Certain authors (Montazeri, Khodaei, 2012; Hajilou, et al, 2018; Dirie, 2005; Blöchliger, Petzold, 2009) identify revenues from external and internal sources, other authors (Blöchliger, Petzold, 2009) identify the revenues generated from taxes and grants from the state budget, while the third tend to classify the revenues by the source of revenue (see Table 1).

Table 1. Classification and structure of the local government budget revenues

Source of revenues	Current revenues	Capital revenues
Own revenues	From taxes From fees/charges Asset from fees) Other	Asset sale Dividends Contributions
Interbudgetary redistribution revenues	Shared taxes General transfers Earmarked grants	General capital Grants Earmarked grants
Revenues from external sources	Borrowing	Loans, bonds Bonds Equity

Source: made by the authors according to Rudytė et al, 2018; Freire, Garzon , 2014

The inconsistency between different LGU revenue classifications influenced the selection and assessment of the revenue indicators of FA of municipalities.

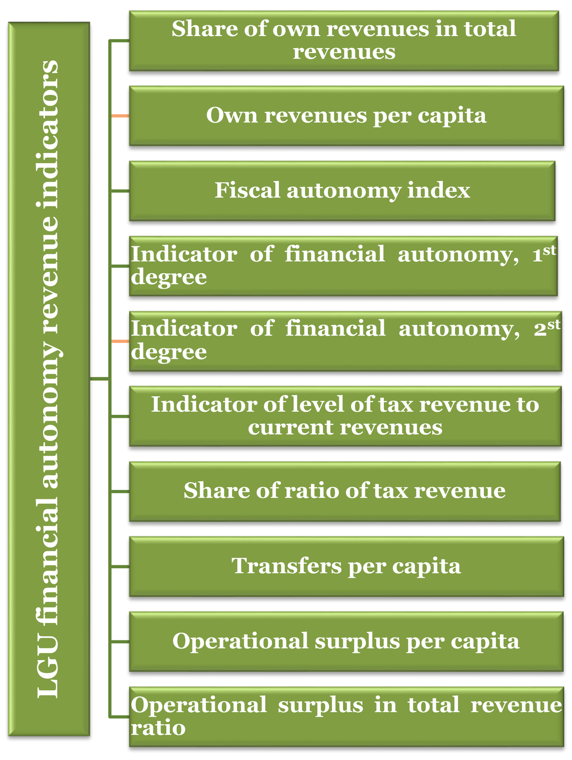

Figure 1. The revenue indicators employed for FA assessment of rural municipalities.
Source: made by the author according to scientific authors

In the empirical studies, researchers (Satoła, Standar, Kozera, 2019; Standar, Kozera, 2019; Glowicka-Woloszyn, Satola, 2018; Luczak, Kozera, Bacci, 2018; Kozera, Luczak, Wysocki, 2017; Kozera, Glowicka-Woloszyn, 2016; Kozera et al, 2016; Kozera, Wysocki 2015) assessed the FA of rural municipalities using diverse revenue indicators. Each author team have different titles for certain indicators, which is sometimes confusing when attempting to learn the role of an indicator. Generally, the following revenue indicators for FA assessment of rural municipalities could be listed (see Figure 1).

Researchers use different sets of revenue indicators for assessment of the FA level of rural municipalities (see Table 2).

Table 2. Number of indicators used for FA level assessment of rural municipalities in the studies.

Authors, Year	Satoła et al. 2019	Standar and Kozera 2019	Głowicka - Wołoszyn and Satoła 2018	Łuczak et al. 2018	Kozera et al. 2017	Scutariu and Scutariu 2015	Jemna et al. 2013
Number of indicators, units	7	7	11	8	9	2	5

Source: made by the author according to scientific sources

According to the study data by OECD, the revenues of Lithuanian municipalities account for 24% of the total state revenues on the average, in EU – 27%, OECD countries – 32% (Improving Lithuanian municipalities' capacity to fund and finance public investment, OECD, 2020). Real LG revenues spiked during the Great Financial Crisis of 2008-10. Since 2013, however, real LG revenues have been growing very slowly, and LG revenues as a share of GG remained virtually flat.

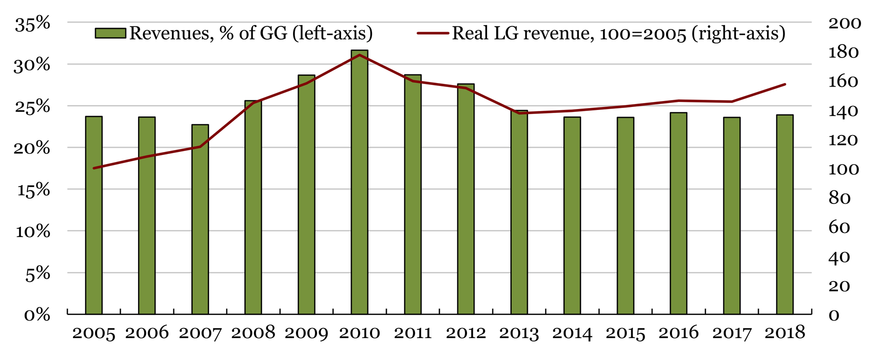

Figure 2. Evolution of LG revenues in real terms.

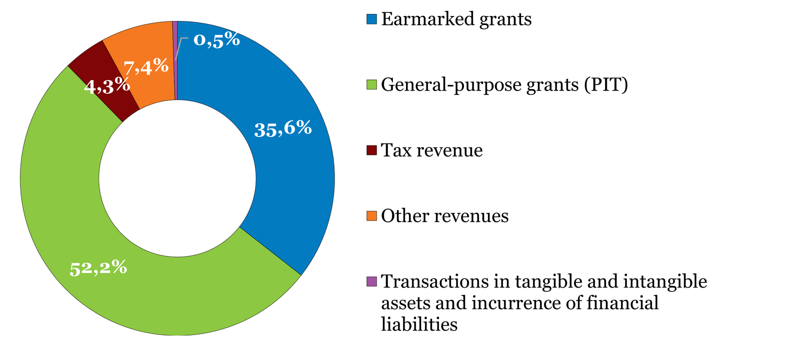

Figure 3. Composition of municipal budget revenues in Lithuania, 2019.

Source: Improving Lithuanian municipalities' capacity to fund and finance public investment, OECD, 2020

A general purpose grant based on the Personal Income Tax (PIT) is the primary source of municipal revenues, the basis of all the revenue sources, and is classified as such by the OECD due to the centralized redistribution. A part of the overall PIT is allocated to municipalities through a fiscal equalisation mechanism. This makes LG's reliance on grants in Lithuania amongst the highest in OECD countries, with CG transfers representing 87.7% of municipal revenues (see Figure3) .

Therefore, high level of grants prevailed in the total revenue structure of the Lithuanian rural municipalities, also signaling lower FA of the municipality. This shows the scarce own financial resources of the Lithuanian rural municipalities. The LGU revenue structure in Lithuania is provided in comparison to other countries (see Table 3).

Table 3. Revenue structure of LGs, comparison with benchmark countries, 2018.

Countries	Taxes	Grants and other revenues	Tariffs & fees	Social contributions
Lithuania	4.2%	89.2%	6.5%	0.1%
Denmark	36.0%	59.3%	4.7%	0.1%
Finland	45.9%	32.1%	22.0%	0.0%
Ireland	18.9%	51.7%	26.3%	3.1%
The Netherlands	10.3%	74.4%	13.7%	1.5%
New Zealand	52.3%	31.6%	16.1%	0.0%

Source: Improving Lithuanian municipalities' capacity to fund and finance public investment, OECD, 2020

Empirical research methodology

PROBLEM AND PERIOD OF THE EMPIRICAL RESEARCH

- **Problem:** *which revenue indicators are employed for FA assessment of the rural municipalities and what are the possibilities for FA improvement in the rural municipalities?*
- **Pilot study period:** *2009–2019.*

RESEARCH DATA AND LIMITATIONS

- **Panel data have been chosen for the research.** The empirical study was based on the statical data on municipality revenues for the period 2009-2019 retrieved from the Statistics Lithuania.
- Limitations have been identified in the research in relation to reliability, correctness and relevance of indicator calculation (in particular, the indicators that define the personal income tax, one of the key municipal taxes).

RESEARCH SAMPLE

- The following quantitative boundaries are proposed for definition of rural municipalities and used in the methodology of the OECD. The municipalities with more than 50% of the population living in the rural type residential areas were considered to be rural municipalities;
- 36 of 60 municipalities in Lithuania fall within the group of rural municipalities $A = (A_1, A_2, A_{3,...} A_i....A_m)$.

RESEARCH STAGE

- **Stage 1.** Selection and calculation of the partial revenue indicators describing FA of rural municipalities (TOPSIS method).
- **Stage 2.** Assessment of FA level of rural municipalities in the period 2009–2019 and formation of the synthetic indicator/index (TOPSIS method).

Figure 4. Research methodology for FA assessment of rural municipalities in terms of revenue
Source: made by the author

Results

Table 4. Revenue indicators of finacial autonomy of rural municipalities and description thereof.

Indicator, unit of measure	Direction of the indicator value	Mean values of the objective significance of the indicator
Own revenues per capita*, EUR	Maximizing	0.493
Index of financial autonomy, 1st degree/share of own revenues in total revenues, (%)	Maximizing	0.135
Transfers per capita, EUR	Minimizing	0.135
State intervention ratio (%)	Minimizing	0.135
PIT (%) in the total municipality revenues	Maximizing	0.134
Fiscal wealth index or tax revenues per capita, EUR	Maximizing	0.120
PIT per capita , EUR	Maximizing	0.118
Non-tax revenues per capita	Maximizing	0.103

Source: made by the author based on data by the Department of Statistics of the Republic of Lithuania

*Limitation. Lithuanian legislative documents do not provide a clear definition of own revenues of municipalities, and both tax and non-tax revenues were considered as own revenues in the empirical study.

Table 5. Classification of rural municipalities by FA level in 2009-2016

EU level	FA indicator margins	Rural municipalities by counties									
		Alytus county	Kaunas county	Klaipėda county	Marijampolė county	Panevėžys county	Šiauliai county	Tauragė county	Telšiai county	Utena county	Vilnius county
I (high)	[0.573; 1]	Alytus, Lazdijai, Varėna distr.	Prienai, Raseiniai distr.			Panevėžys distr.	Šauliai distr.		Rietavas distr.		Vilnius distr.
II (medium high)	[0.523; 0.573)			Klaipėda, Kretinga, Skuodas, Šilutė distr.		Kupiškis distr.	Pakruojis, Radviliškis distr.	Jurbarkas distr.			Šalčininkai distr.
III (medium low)	[0.473; 0.523)		Kaišiadorys distr.		Kazlų Rūda, Šakiai distr.	Biržai, Pasvalys, Rokiškis distr.	Joniškis, Kelmė distr.	Pagėgiai, Šilalė distr.			Širvintos distr.
IV (low)	[0; 0.473)		Kaunas distr.		Kalvarija, Vilkaviškis distr.					Anykščiai, Ignalina, Molėtai, Zarasai distr.	

Source: made by the author

Table 6. Classification of rural municipalities by FA level in 2017-2019

EU level	FA indicator margins	Rural municipalities by counties									
		Alytus county	Kaunas county	Klaipėda county	Marijampolė county	Panevėžys county	Šiauliai county	Tauragė county	Telšiai county	Utena county	Vilnius county
I (high)	[0.669; 1]	Alytus distr.		Skuodas distr.						Zarasai distr.	
II (medium high)	[0.642; 0.669)	Lazdijai, Varėna distr.	Kaunas, Prienai, Raseiniai distr.	Kretinga distr.		Kupiškis, Panevėžys, Pasvalys, Rokiškis distr.	Joniškis, Kelmė, Pakruojis, Radviliškis, Šauliai distr.	Jurbarkas, Šilalė distr.	Rietavas distr.	Anykščiai distr.	Šalčininkai distr.
III (medium low)	[0.615; 0.642)		Kaišiadorys distr.	Šilutė distr.	Kazlų Rūda distr.	Biržai distr.		Pagėgiai distr.		Ignalina, Molėtai distr.	Širvintos, Vilnius distr.
IV (low)	[0; 0.615)			Klaipėda distr.	Kalvarija, Šakiai, Vilkaviškis distr.						

Source: made by the author

Main conclusions

1. According to the empirical study results, own revenues per capita in rural areas changed considerably in 2007-2019, but the change was related to legislative amendments. Moreover, another issue is the lack of legislative clarity in Lithuania in terms of the definition of "own revenues" of municipalities; hence, both tax and non-tax revenues were considered to be own revenues in the empirical study. This also affected the study results.
2. In the municipal revenue structure in 2017-2019, PIT was found to account for 68% (2017 – Pagėgiai municipality) to 90 % (2019 – Kalvarijos municipality); however, PIT per capita (EUR) did not change considerably in the period analyzed. This indicated that the rural municipalities were highly dependent on centralized public finance management and redistribution of funds. Hence, this raises the question for discussion on whether the "earned" PIT may be considered own revenues.
3. Rural municipalities were making very little use of the potential to increase the non-tax revenues, which accounted for the smallest share in the total revenue structure. This kind of revenue is the basis for promotion of the entrepreneurship, sustainability, social, economic, and financial prospects for the municipalities.

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