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OWN REVENUE POTENTIAL OF SMALL TOWNS IN POLAND[1]

Summary

Purpose – Assessing the level of and differences in own revenue potential of small cities having the status of urban municipalities. The study intended to answer the following research question: do the cities having the status of urban municipalities lag far behind greater towns in terms of own revenue potential, and has the gap between them grown over the years? – Is there a wide diversity in the level of own revenue potential of small towns depending on their level of development and functions? – What are the most important internal determinants affecting the level of own revenue potential of small towns with urban municipality status?

Research method – The empirical research was conducted based on secondary data from the Local Data Bank of Statistics Poland, processed using basic descriptive statistics and taxonomic methods. The focus of the study was on small towns (with less than 20 thousand inhabitants) with urban municipality status (116 entities in 2020). The time span of the study was 2007–2020.

Results – The potential for own revenue of cities having the status of urban municipalities varies strongly between them, but is on average only slightly smaller than that of other urban municipalities. Also, the fact that it is growing should be viewed as a positive development. While its level is impacted by internal conditions, external ones were the reason why in 2020 it stopped growing as fast as in the previous years.

Originality/value/implications/recommendations – Monitoring the level of small cities' own revenue potential due to their importance (77% of all cities, "rural growth poles",

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"local development centres") is aimed, among other things, at identifying financially disadvantaged units that may require state intervention in accordance with the implementation of the subsidiarity principle.

Keywords: towns, urban municipalities, own revenue potential, economic potential, own revenue, stable sources of revenue, socioeconomic situation, local development

JEL classification: C38, H71, H72, R51

1. Introduction

Cities and towns are a particularly important element of the social and economic fabric of any country. There are more than 950 cities and towns in Poland (as at 1 January 2022), most of which are small towns with a population of up to 20,000 (more than 77% of the total) [*Local Data Bank*, www.bdl.gov.pl, *Poland in Figures*]. Small urban centres (functioning as local centers) are places where not only the needs of their inhabitants are met, but also those of the population of the surrounding rural areas [Rydz, 2006, pp. 7–8; Heffner, 2016, pp. 11–12]. The presence of a town, as pointed out i.a. by Konecka-Szydłowska and Perdał [2017, pp. 29, 44], is a factor in the socio-economic activation of these areas. It is certainly for a reason that the literature refers to small urban centres as "growth poles in rural development" [Courtney et al., 2007, p. 1219]. Heffner [2016, pp. 11–12, 15] also adds that they are the basis for shaping not only local, but also regional conditions for economic growth and social and cultural life. However, it is often that their role is marginalised and their impact and synergy are underestimated.

Small towns in Poland vary in terms of their socio-economic situation and the functions they perform. Both tourist cities and highly urbanized areas of agglomerations ("bedroom communities" of big cities) having the status of urban municipalities, are in a relatively good social and economic situation. However, a significant proportion of small towns face numerous problems. These are related to, among other factors, the outmigration of young people, a lack of attractive jobs, a high percentage of economically inactive people, limited access to development services for businesses, and poor public transport, all of which hinders their development [*Scenariusze rozwoju małych…*, 2019, p. 5]. The unfavourable social and economic situation contributes to the limited financial capabilities of local authorities due to their low own revenue potential and therefore to their low level of financial autonomy. Filipiak [2016, p. 643] points out that revenue is an essential factor for accelerating development, or for increasing the quality and standard of tasks performed by municipalities to date, which ultimately is reflected in the standard of living of their inhabitants. Zawora [2018, pp. 224–225], on the other hand, adds that revenue is one of the important factors to shape decisions on day-to-day issues as well as on investments. Of particular importance in this regard are the sources of own revenue available to municipalities, which are stable and can be the basis for assessing the long-term capability of municipalities to finance their tasks referring to revenue from these sources as their own revenue potential [Lubińska et al., 2007, pp. 77–78]. Research on the assessment of the developments in the level, structure and dynamics of changes in own revenue potential of small towns is therefore not only of cognitive value, but also that of applied research. Monitoring the level of own revenue potential, particularly that of small towns, due to their importance, is intended, among other things, to identify financially disadvantaged entities that may require state intervention in line with the subsidiarity principle.

The main purpose of this paper is to assess the level of and differences in own revenue potential of small cities having the status of urban municipalities. The study intended to answer the following research question: Do the cities having the status of urban municipalities lag far behind greater towns in terms of own revenue potential, and has the gap between them grown over the years covered by this study? Is there a wide diversity in the level of own revenue potential of small towns depending on their level of development and functions? What are the most important internal determinants affecting the level of own revenue potential of small towns with urban municipality status?

2. Own revenue potential of local government units – theoretical connotations

The overall potential of a local government unit is a resultant of the various partial potentials that determine its specificity, advantages and developmental capability. Thus, the potential of a particular local government unit includes not only the (material, human and environmental) resources that can be found within that unit, but also the possibilities and skills to use and shape them in the future [Filipiak and Tarczyńska-Łuniewska, 2016, p. 14]. The endogenous potential discussed above, as opposed to macroeconomic conditions, is a feature differentiating individual areas – e.g. cities/towns – which implies, among others, the disparities in the level and structure of their revenues (including the so-called own revenue)

[Wójtowicz, 2019, pp. 141–150]. In accordance with the *Constitution of the Republic of Poland*, own revenue of local government units is revenue that does not constitute a general subvention or targeted grants from the state budget. In turn, the Act of 12 January 1991 on *Local Taxes and Fees* defines own revenue as that "related to local budgets in a permanent manner, without any restriction by the state and without state's participation in the share of revenue achieved from the various sources placed under the authority of local government associations". The own revenue of local government units, its per-capita amount and its share in total revenue, are treated as the basic determinant of their financial independence [Surówka, 2013, pp. 30–45; Głowicka-Wołoszyn et al., 2018, p. 177; Kozera, 2018, p. 88; Satoła et al., 2019, pp. 324–325]. Poniatowicz [2016, p. 10] also points out that own revenue is a strategic element in the system of local government finances, not only from the perspective of assessing their financial independence, but also in the context of their possibilities to apply for EU funds. The own revenue potential of local government units is one of the factors enabling to shape stable local development. It includes, according to Lubińska et al. [2007, pp. 78–80], most of the sources of own revenue of local government units that are stable over a long time. Remarkably, stability is one of the economic and financial concepts that has seen dynamic development from both the theoretical and practical perspective [Jajuga et al., 2017, pp. 24–36].

In the long run, the most stable part of LGUs' (including cities') own revenue is what is referred to as their own revenue potential. It is usually perceived as the sum of municipalities' revenues from state taxes (PIT and CIT) and selected local taxes (which include real estate tax, tax on means of transport, tax on civil law transactions and agricultural tax) [Lubińska et al., 2007, p. 80]. Revenue from these taxes, as pointed out by Głowicka-Wołoszyn et al. [2018, p. 35], is the most significant contributor to local government budgets and, importantly in terms of formulating assessments of the social and economic situation of cities and towns, indirectly testifies to the revenue and economic potential of the population living in a specific area. At the same time, assessing the developments in the level, structure and dynamics of changes in stable revenue potential makes it possible to determine the long-term capability of local authorities to finance the tasks they carry out.

A high level of own potential on the part of local authorities, and consequently considerable financial and decision-making autonomy, are issues covered by the theory of fiscal federalism and the theory of localism. The precursors of the theory of fiscal federalism, Ch.M. Tiebout [1956], R.A. Musgrave [1959] and W.E. Oates [1968], pointed to the optimal organisation of the administrative division of the state in order to increase the effectiveness and efficiency of the public sector and the proper allocation of public goods [Stiglitz, Rosengard, 2015, pp. 197–250]. As the contact between the local authorities and inhabitants is close, administrative costs can be lower, and this affects competition between local government units and the ability to provide goods and services at a lower price [Dziemianowicz, Poniatowicz, 2016, pp. 298–299]. The implementation of the theory of federalism results in increased awareness with regard to taxation, interest in public affairs and co-determination of expenditure policy. As observed by Wyszkowska [2018, pp. 129–132], proponents of fiscal federalism advocated for the local level to be financed only from local taxes and fees, with a clear allocation of sources of revenue. An analysis by Poniatowicz [2015, pp. 248–249] reveals that, on the one hand, a higher level of local financial autonomy results in greater efficiency and economic development [cf. Ebel, Yilmaz, 2002, p. 36], but on the other hand, it can cause (among other consequences) an increase in public debt, corruption or inefficiency in the provision of public goods [cf. Ackerman, 1978, p. 235].

The close relationship between local authorities and individuals and, consequently, better awareness of residents' needs and their more effective fulfilment also underpins the theory of localism. Its founders recommended that local government units should be endowed with considerable autonomy based on the principles of subsidiarity, self-governance, decentralisation and democracy. This concept addresses the issues of the level of autonomy, the participation of territorial local government units in state finances, and the role of the state in fostering bottom-up development, which are so important from the perspective of the research problem under consideration [Wyszkowska, 2018, pp. 129–132].

It should be emphasised that the extent of the aforementioned financial autonomy of a particular local government results from the level of decentralisation, i.e. the processes of shifting political, administrative and fiscal powers from central to local authorities [Poniatowicz, 2015, pp. 246–247]. The decentralisation of public tasks is associated with the decentralisation of public finances, which concerns the spheres of revenue and expenditures [Famulska et al., 2019, pp. 7–11]. In Poland, economic and financial policy is pursued at the national level, and it is the state that has at its disposal response instruments that can be used in attempts to stabilise the macroeconomic situation and influence the budget situation. The scope of local government activities, in turn, is severely limited [Swianiewicz, Łukomska, 2020a, pp. 10–11]. This is particularly important in recent times marking a period of addressing the effects of a pandemic [cf. *Badanie sytuacji finansowej*..., 2020, pp. 10–48; Swianiewicz, Łukomska, 2020b, pp. 7–32;

Kostyk-Siekierska, 2021, pp. 29–45]. This is also a time of economic downturn, the effects of which on local government finances have been extensively analysed before, in the context of the 2008–2009 crisis [cf. Owsiak, 2011, pp. 174–183; Surówka, 2014, pp. 376–377] and legislative changes [Nelicki, 2020, pp. 1–22], most notably concerning taxation [cf. The Act of 29 October 2021 on amending the Personal Revenue Tax Act, Journal of Laws of 2021, item 2105; the Act of 9 June 2022 amending the Personal Revenue Tax Act and certain other Acts, Journal of Laws of 2022, item 1265], obviously affect the financial situation, including the developments in the level and structure of own revenue potential of local governments [cf. Surówka, Winiarz, 2011, pp. 349–356; Dziemianowicz, 2017, pp. 97–105].

Already the first investigations on the impact of the pandemic on the financial situation of local government demonstrated the adverse consequences it had on LGUs across the European Union. The decline in revenues derived from their own potential (primarily including personal and corporate revenue taxes and property taxes) gave rise to the greatest concern, and could further result in reductions in expenditure [Malinowska-Misiąg, 2022, pp. 49–62; *Badanie sytuacji finansowej*…, 2020, pp. 19–21]. Since the streams referred to above are of particular importance to cities, their budgets would be exposed to the greatest risks.

The analysis of own revenue potential is especially important with respect to cities because of the role they play for their residents (endogenous functions) and for the development of surrounding areas (exogenous functions). While endogenous functions are of a secondary nature (they are not the reason behind the creation and development of a city), they are decisive for urban living conditions (including residential housing, municipal engineering), which makes them so important to the residents. In turn, exogenous functions (urban development drivers) determine urban activities focused on nonlocal markets [Brol, 2004, pp. 1–266]. The way the cities extend these functions is crucial, since according to the theory by H. Hoyt and D.C. North (pioneers of the economic base theory) they are the drivers of wealth. However, the W. Christaller's central place theory claims that small cities have a narrower range of impact on their surroundings than bigger ones, but economic, social and cultural links nevertheless exist between the areas that are closest to one another. Also, in line with the Perroux's concept, these cities are growth poles which provide momentum to stimulate the activity of underdeveloped and less dynamic parts of the region. However, the positive impacts of cities on their suburbs can be accompanied by adverse developments, such as the out-flow of skilled labour force [Domański, 2006, pp. 1–318; Sokołowski, 2006, pp. 1–276; Chądzyński et al., 2007, pp. 1–258].

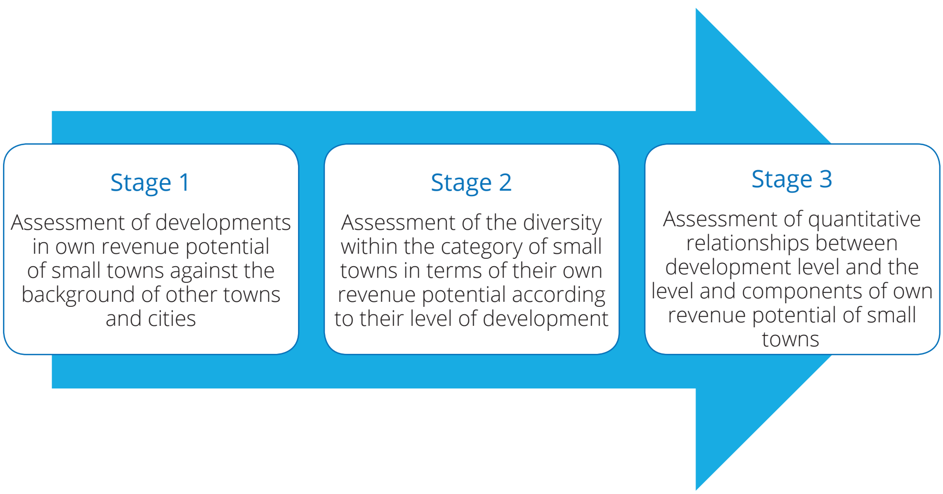
3. Research materials and methods

The empirical research used secondary data from the *Local Data Bank* of Statistics Poland [www 1]. Owing to the availability of empirical data, the focus of the study were small towns with a population of 20,000 or less and with urban municipality status. In 2020, these criteria were met by 116 towns [*Local Data Bank*…].

The research objective was the assessment of: total own revenue (its per capita level and share in total revenue), the structure of own revenue, as well as the level and share of stable sources of own revenue in total own revenue (constituting the municipalities' own revenue potential), determined as the sum of revenue from PIT and CIT revenue taxes and local taxes: tax on real estate, means of transport, civil law activities and agricultural tax [Lubińska et al., 2007, p. 80; Gubernat-Ulatowska, 2016, p. 49]. The revenues of LGUs covered by the study were analyzed at 2007 constant prices.

CHART 1

Steps of research on the development of own revenue potential of small towns having the status of urban municipalities in Poland



Source: authors' own elaboration.

In order to achieve the formulated research objective, as well as to answer the research questions asked, empirical research was conducted in three stages (Chart 1). In the first stage of the research, the developments in the level, structure and dynamics of changes in the own revenue potential of small towns were assessed against the background of total urban municipalities (without cities/towns with poviat status – C/TwPS) and cities/towns with poviat status in the years 2007–2020. The data collected was processed using basic methods of descriptive statistics (including measures of location, variability and asymmetry).

The second stage of the research involved an assessment of the diversity within the category of small towns in terms of their own revenue potential according to their level of social and economic development. This research was carried out based on averages (medians) for 2018–2020. In this stage of the research, the collected empirical data was processed using descriptive statistics and taxonomic methods. The level of development of territorial units is a complex (multi-dimensional) concept, so it was measured using the selected method of synthetic measure construction (Chart 2). The set of simple characteristics defined on the basis of the factual premises (more than 20 simple characteristics reflecting, among others, the demographic, social, economic situation, the level of infrastructure development) was further statistically verified in terms of the information potential of the characteristics (the extent of their correlation with other characteristics) and their discriminatory capacity (i.e. their variability in relation to the surveyed objects).

CHART 2

Assessing the differences between small towns in own revenue potential in function of their socioeconomic development levels with the use of TOPSIS

Step 1	• Selection of simple characteristics that determine the level of development of small towns based on factual and statistical premises
Step 2	• Normalisation of values of simple characteristics using zero-unitarisation procedures
Step 3	• Calculating the values of the ideal positive solution and the ideal negative solution, and the Euclidean distances between each small town covered by the study and the ideal solutions
Step 4	• Using the Euclidean distances as a basis for calculating the value of the synthetic metric of development levels for small towns based on TOPSIS method
Step 5	• Construction of typological classes of the development level of small towns based on the values of the constructed synthetic measure
Step 6	• Assessment of the development of the level of own revenue potential and its components in the identified development level classes of small towns

Source: authors' own elaboration based on [Wysocki, 2010].

Next, they were normalized using the unitarization procedure as per the formulas below:

- $z_{ik} = \dfrac{x_{ik} - \min\{x_{ik}\}}{\max\{x_{ik}\} - \min\{x_{ik}\}}$ for variables with a stimulating effect,
- $z_{ik} = \dfrac{\max\{x_{ik}\} - x_{ik}}{\max\{x_{ik}\} - \min\{x_{ik}\}}$ for variables with an inhibiting effect,

where:
x_{ik} – value of feature *k* for object (towns),
{min}x_{ik} – minimum value for feature *k*,
{min}x_{ik} – maximum value for feature *k*.

The Euclidean distances between each small towns and the ideal development scenarios (the positive ideal solution d^+ and the negative ideal solution d^-) were subsequently calculated using the following formulas:

$$d^+ = \sqrt{\sum_{k=1}^{N} (z_{ik} - z_k^+)^2}, \quad d^- = \sqrt{\sum_{k=1}^{N} (z_{ik} - z_k^-)^2} \ .$$

The TOPSIS method was then used to build the values of the synthetic feature based on estimated Euclidean distances:

$$S_i = \frac{d_i^-}{d_i^+ - d_i^-} \ ,$$

with $i = 1, 2, \ldots, N$.

The values of the synthetic metric of development levels were used as a basis for the typological classification into four development levels of small cities covered by the study. A statistical approach was used in structuring the typological classes based on the arithmetic mean $(\bar{q})$ and standard deviation (s_q) of the synthetic metric [Wysocki, 2010, p. 168]:

- class 1: $S_i \geq \bar{q} + s_q$ (small towns at high development levels),
- class 2: $\bar{q} + s_q > S_i \geq \bar{q}$ (small towns at medium-high development levels),
- class 3: $\bar{q} > S_i \geq \bar{q} - s_q$ (small towns at medium-low development levels),
- class 4: $S_i < \bar{q} - s_q$ (small towns at low development levels).

4. The results of empirical research

Own revenue of cities and towns is the main source of their budget revenue. However, unfavourable changes in the social and economic situation, including the process of depopulation of towns (especially small ones) and the ageing of the population, may affect their own revenue potential and financial autonomy and, consequently, contribute to a reduction in the dynamics of their development. The empirical research has shown that small towns tend to have a lower level of own per capita revenue in relation to the total of urban municipalities in Poland, but the difference is relatively small. In 2020, the average level of own revenues of small cities having the status of urban municipalities was PLN 2,048.9 per capita (at 2007 constant prices), which is as much as 97% of average revenues of all urban municipalities (other than urban districts). Hence, small cities having the status of urban municipalities prove to be in a relatively good condition compared to the general population of urban municipalities (other than urban districts). A significantly higher level of the discussed own revenue per capita is characteristic of the largest cities which function as cities/towns with poviat status. In 2020, own revenue of these entities amounted on average to nearly PLN 2 694.7 per capita (at 2007 constant prices) and was nearly 30% higher in relation to the average urban municipality (excluding cities/towns with poviat status) (Chart 3).

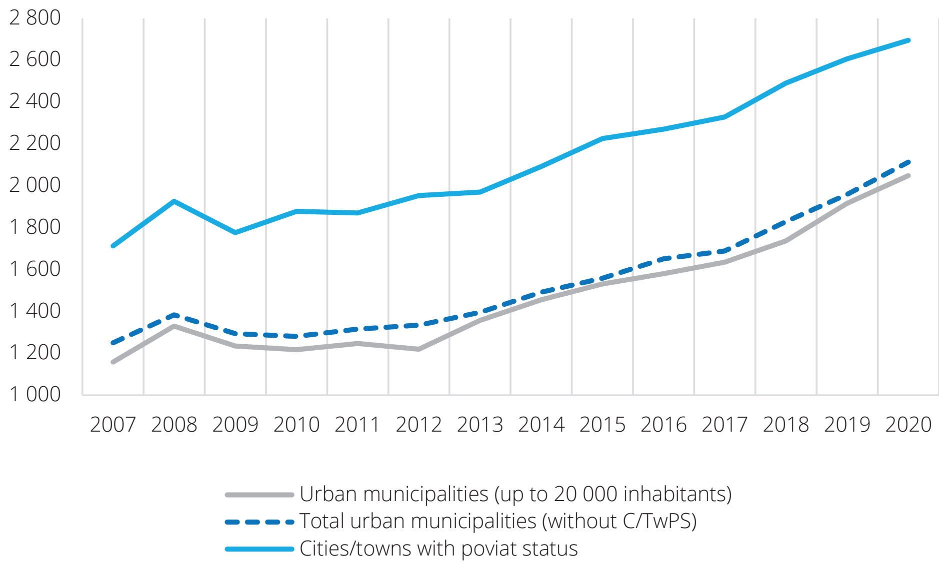
It should be noted, however, that the disparity between small towns and larger urban centres in terms of their own revenue per capita has been decreasing over the years. Between 2007 and 2020, small cities witnessed the greatest growth in real own revenues per capita, at a rate of nearly 77%, compared to 70% for the general population of urban municipalities (other than urban districts) and barely 60% for urban districts (Chart 3).

However, small towns (up to 20 000 inhabitants) with urban municipality status are distinguished by the highest level of diversity in terms of the analysed phenomenon. This is evidenced by the highest value of the coefficient of variation of the level of own revenue achieved per capita, both in 2007–2009 and in 2018–2020. In addition, an increase in this variation was observed over the period under review, while the variation decreased slightly for the other analysed entities. The high positive values of the asymmetry coefficient additionally reveal that, in the set of small towns with urban municipality status, the territorial units achieving a lower than average level of own revenue per capita were predominant (Chart 3).

CHART 3

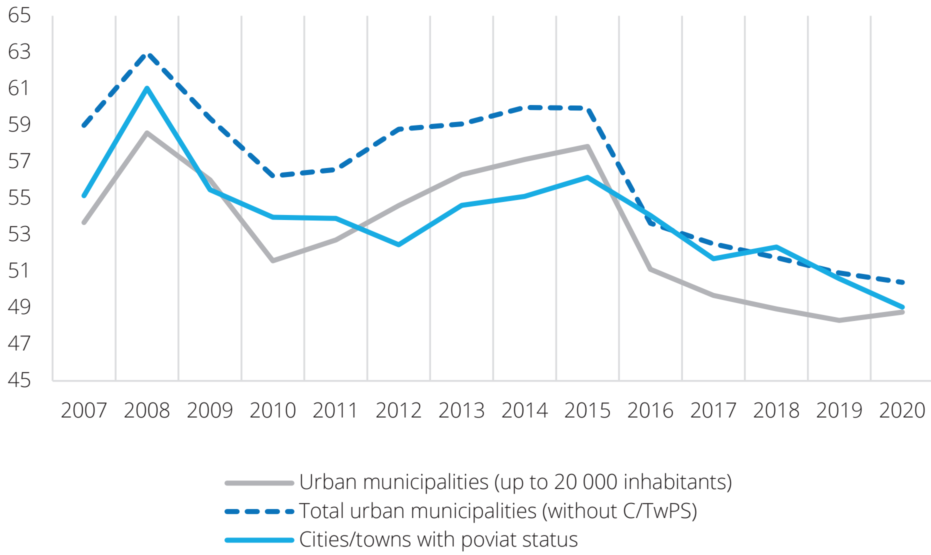
Level of own revenue per capita and its share in total revenue of small towns with urban municipality status in comparison with total urban municipalities and cities/towns with poviat status in Poland in 2007–2020 (average values – medians)

a) Own revenue per capita in PLN (at 2007 constant prices)



Analysed entities	Median		Coefficient of variation (%)		Coefficient of asymmetry	
	2007–2009	2018–2020	2007–2009	2018–2020	2007–2009	2018–2020
Urban municipalities (up to 20 000 inhabitants)	1223.1	1833.3	20.7	23.0	0.29	0.47
Total urban municipalities (without C/TwPS)	1305.7	1941.5	16.6	14.8	0.05	0.24
Cities/towns with poviat status	1792.0	2596.8	13.7	11.8	0.21	0.37

b) Share of the own revenue in total revenue (%)



Analysed entities	Median		Coefficient of variation (%)		Coefficient of asymmetry	
	2007–2009	2018–2020	2007–2009	2018–2020	2007–2009	2018–2020
Urban municipalities (up to 20 000 inhabitants)	56.7	48.4	14.5	13.4	0.07	0.25
Total urban municipalities (without C/TwPS)	61.1	50.8	11.6	10.9	-0.09	0.03
Cities/towns with poviat status	56.7	50.2	10.6	9.0	0.33	0.18

Source: authors' own elaboration.

The share of own revenue in total revenue for small towns with urban municipality status amounted to nearly 49% in 2020, decreasing by 4.7 percentage points in relation to 2007. A slightly higher share of own revenue in total revenue can be observed in urban municipalities in general (excluding cities/towns with poviat status), as it amounted to almost 52% in 2020. However, for the analysed local government units, its share decreased during the period under review by more than 7.2 percentage points. The decrease in the share of own revenue in the budgets of the analysed entities was caused, on the one hand, by the recession and lockdowns caused by the COVID pandemic; on the other hand, external sources of revenue increased due to the introduction of the 500+ programme by the government starting from 2016. The measures under this programme are a task delegated to local government units by the government administration, and the costs of the measures are covered by the state budget through targeted grants (the Act of 11 February 2016 on State Assistance in Raising Children, Journal of Laws of 2016, item 195). According to Nelicki [2020, pp. 2–3], the third factor determining the deterioration of local government revenue structure was the choice of grant-based support for local governments (Chart 3).

There is a relatively large difference between small towns in terms of the ratio of own revenue to total revenue. This is evidenced, for example, by the highest value of the coefficient of variation for the share of own revenue in the total revenue of small towns. However, it should be noted that this variation has decreased slightly in 2018–2020 compared to 2007–2009. The difference between small towns with urban municipality status and urban municipalities in general has also decreased in this respect (Chart 3).

In the structure of own revenue of all local government units, the most important item is revenue from personal revenue tax (PIT). For the smallest towns with urban municipality status, it accounted for more than 37% of their own revenue between 2018 and 2020. The larger the territorial unit in terms of demographic potential (quantified by population density per km^2), the higher the share of this category of revenue in total revenue. In the case of cities/towns with poviat status, revenue from PIT accounted on average for more than 43% of their total own revenue. In 2019–2020, in relation to 2007–2009, the share of revenue received from PIT in own revenue has increased in all the analysed territorial units, while the share of revenue received primarily from property tax and property revenue has decreased. It is worth noting, however, that among local taxes, the most important source of own revenue for cities and towns is exactly the revenue obtained from property tax. Indeed, in the case of the smallest towns as well as cities and towns in general (excluding C/TwPS), it accounted for more than one-fifth of their own revenue (Table 1).

TABLE 1

The structure of own revenue of small towns with urban municipality status in comparison with total urban municipalities and cities/towns with poviat status in Poland in 2007–2020 and 2018–2020 (%)

Item	Urban municipalities (up to 20,000 inhabitants			Total urban municipalities (without C/TwPS)			Cities/towns with poviat status		
	2007–2009	2018–2020	Change (in percentage points)	2007–2009	2018–2020	Change (in percentage points)	2007–2009	2018–2020	Change (in percentage points)
Agricultural tax	0.3	0.2	-0.1	0.2	0.1	-0.1	0.1	0.0	0.0
Woodland tax	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Tax on real estate	26.4	22.8	-3.6	25.8	23.2	-2.6	19.7	19.5	-0.2
Tax on means of transport	1.3	0.8	-0.5	1.3	0.8	-0.5	1.1	0.7	-0.4
Tax on civil law activities	2.2	1.8	-0.4	2.4	1.9	-0.5	2.7	2.0	-0.6
Personal revenue tax (PIT)	34.3	37.4	3.1	37.1	38.9	1.9	42.0	43.3	1.3
Corporate revenue tax (CIT)	1.5	1.4	-0.1	1.9	1.7	-0.2	3.5	2.7	-0.8
Stamp duty	0.5	0.2	-0.3	1.4	0.4	-0.9	1.0	0.4	-0.6
Revenue from assets	11.8	7.4	-4.4	10.2	7.6	-2.6	7.7	6.4	-1.4
Receipts from services	2.4	2.1	-0.3	2.3	1.7	-0.6	3.1	4.3	1.2
Receipts from other local charges collected by local government units pursuant to separate acts	0.1	7.3	7.2	0.1	7.3	7.2	0.3	6.0	5.7
Other	19.1	18.5	-0.6	17.3	16.2	-1.1	18.8	14.5	-4.2

Source: authors' own elaboration based on data from the *Local Data Bank of Statistics Poland* [date of access: 9.06.2022].

Own revenue potential is identifiable with own revenue of local government units. However, special attention should be directed to the most stable sources of own revenue, which, according to a study by Lubińska et al. [2007, pp. 77–80], include income from PIT and CIT state taxes and from such local ones as taxes on means of transport, real estate, civil law transactions and agricultural tax. Receipts from these taxes, as highlighted by Głowicka-Wołoszyn et al. [2018, pp. 176–177], have the highest level of stability in the funding of city/town budgets, but, importantly in terms of formulating assessments of the social and economic situation of these entities, they indirectly testify to the revenue potential of the population living in the area. In per capita terms, the highest level of stable own revenue is typical for cities/towns with poviat status, while the lowest level is in small towns with up to 20,000 inhabitants with urban municipality status. In 2020, stable streams of own revenue per capita amounted to PLN 1,828.2 in the largest urban municipalities and PLN 1,277.1 in the smallest cities (at 2007 constant prices). However, during the study period, small cities reduced the distance separating them from the biggest ones because of faster growth rates of stable streams of own revenues (urban districts saw a real growth rate of over 40% vs. over 47% in cities with a population below 20,000) (Chart 4).

In contrast, the share of stable sources of revenue in own revenue showed a high level of variability and changes between 2007 and 2020. While in 2007 all the analysed groups of local government units had an average share of stable sources of revenue of more than 74%, in 2020 this share was already below 68%, and in the case of the smallest urban centres with urban municipality status, it was 62% on average. For most urban municipalities, the lowest share of stable revenue sources in their own revenue was observed in 2010 and 2020. The fiscal performance of many sources of own revenue is influenced by macroeconomic factors, including economic fluctuations. In Poland, 2009 and 2010 saw a weakening of the fiscal performance of many sources of own revenue of local government units, particularly sensitive to the effects of the economic downturn (e.g. PIT, CIT, tax on real estate). Another period of a substantial decline in the phenomenon in question was 2014 and, most significantly, 2020. The sharp decline in the share of stable revenue sources in own revenue was caused, among other factors, by the COVID-19 pandemic, which affected the economic situation of local authorities, especially of cities and towns (cf. *Badanie sytuacji finansowej*…, 2020, pp. 14–16; Swianiewicz and Łukomska, 2020b, pp. 7–32; Kostyk-Siekierska, 2021, pp. 41–42]. The second important reason was the changes in tax policy introduced by the government with regard to personal and corporate revenue tax. Since October 2019, the PIT rate has been reduced from 18% to 17% and a PIT-0 has been introduced for those under 26 years of age. In 2017, the CIT rate for small business taxpayers decreased from 19% to 15%, and in 2019 it has already amounted to just 9%

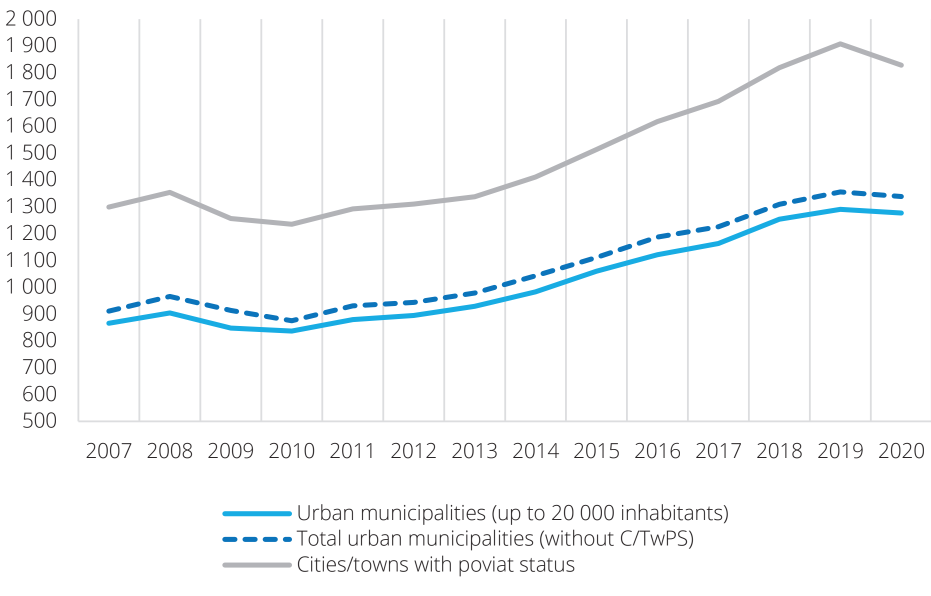
[www 2]. The limited stability of revenue of local government entities, as Poniatowicz [2016, p. 12] notes, is primarily attributable to frequent changes in legal regulations directly or indirectly affecting the local government revenue system. This is the situation, for example, with revenue from personal revenue taxes, one of the main sources of own revenue for cities and towns, for which various types of tax preferences and changes to the tax-free amount are introduced.

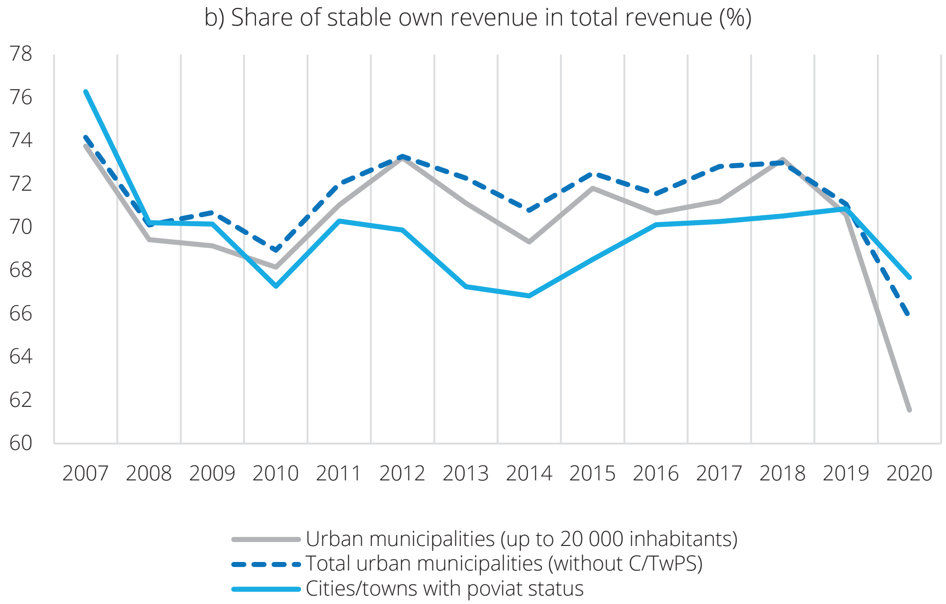
The level, as well as the structure, of small towns' own revenue potential is a derivative of their level of social and economic development and their functions. It has been repeatedly pointed out in the literature that there is a feedback loop between indicators reflecting the social and economic situation and the financial indicators of local government units [Dennis, 2004, pp. 90–93; Standar, 2017, pp. 84–88; Stanny, Strzelczyk, 2018, pp. 132–136]. Financial resources, including those representing the own revenue potential of local government units, are necessary to finance public services and make investments that stimulate urban development.

CHART 4

Level and share of stable own revenue in total own revenue of small towns with urban municipality status in comparison with total urban municipalities and cities/towns with poviat status in Poland in 2007–2020

a) Level of stable own revenue per capita (at 2007 constant prices, in PLN)





Source: authors' own elaboration based on data from the *Local Data Bank of Statistics Poland* [date of access: 9.06.2022].

On the other hand, the increase in the attractiveness of small towns in terms of residential and economic conditions, attracting new residents and investors locating new businesses in the territorial unit, translates into an increase in revenue from e.g. PIT, CIT, real estate taxes, and thus an increase in their own revenue potential. In this part of the article, research was carried out to assess the quantitative relationship between the level of development of small towns and the level of their own revenue potential. In the first stage of the research, the development of the level of own revenue potential and its components were examined in the identified classes of the level of development of small towns, while in the second stage, the occurring correlation relations between the values of the synthetic measure of the level of development of small towns and the selected indicators illustrating the level of own revenue potential of the studied territorial units were examined.

Small towns with urban municipality status are diverse in their level of socio-economic development. In order to assess this diversity – due to the multidimensional nature of the phenomenon under study – the level of socio-economic development of these entities was measured using the TOPSIS method (Table 2). Between 2018 and 2020, only 20 small towns (i.e. 17.2%) demonstrated a high level of development, medium higher and medium lower – 37 and 45 entities respectively (31.9% and 38.8%), and a low level – 14 municipalities (i.e. 12.1%). This means that an average level was recorded for the vast majority of the analysed towns. The characteristics taken into account in the study that are responsible for the component determinants of development, such as demography, economy and infrastructure, generally changed in direct proportion to the class, i.e. the higher the level of development, the more favourable the results of the sub-indices and vice versa (Table 2).

The development level classes of the analysed units were the basis for conducting an analysis of their relationship with the level of their own revenue potential. Small towns with a high level of development are characterised by the most favourable results in terms of their own revenue potential, measured by their own revenue (the level of own revenue per capita was PLN 3,147.7, representing 57.2% of total revenue) and its stable sources (74.2% of total revenue). These results are due to the fact that these are the municipalities with the highest level of urbanisation and business development. When population density changes in the number of inhabitants and the net migration rate are the most favourable, revenues from PIT are the highest. Due to the most developed infrastructure, they are attractive places to live, which determines the size of the second most important source of own revenue, i.e. real estate tax. The aforementioned infrastructure is also the basis for the development of businesses, which provides the highest revenues from CIT (Tables 2 and 3).

Small towns with a medium-higher level of development also had a relatively high own revenue potential. These municipalities were generally characterised by more favourable values of the studied indicators in relation to the average for small towns in general. Their level of own revenue was PLN 2,516.1, representing 52.6% of total revenue, and the share of stable sources of own revenue in total own revenue was 69%. These are small towns representing slightly lower demographic, social and economic potential, which is reflected in the relatively lower revenues from the various analysed taxes (Tables 2 and 3).

A lower-than-average level of own revenue potential is characteristic of municipalities constituting the medium-lower development level class. Due to poorer infrastructural conditions, these towns are not as attractive to live and run a business in, which affects the level of the individual components of their own revenue potential and therefore the final values. It is worth noting that this is a group of towns characterised by greater external revenue (53.4%) than own revenue (46.6%), which means greater dependence of the analysed group of local authorities on the state budget (Tables 2 and 3).

The characteristic feature of small towns with the lowest level of development (Class IV) is the least favourable results of the studied indicators in terms of the analysed phenomenon. The own revenue per capita of this class of towns averaged just PLN 2,084.6 and accounted for 41.9% of total revenue. This demonstrates the lowest level of financial independence of these entities out of all the classes considered and the highest level of dependence on external sources. This is due to the fact that, despite being urban units, they also have an agricultural function to some extent, hence the highest level of revenue from agricultural tax and the lowest level of revenue from PIT and CIT (Table 3).

TABLE 3

Development level vs. developments in own revenue potential of small towns with urban municipality status in Poland in 2018–2020 (mean values – medians)

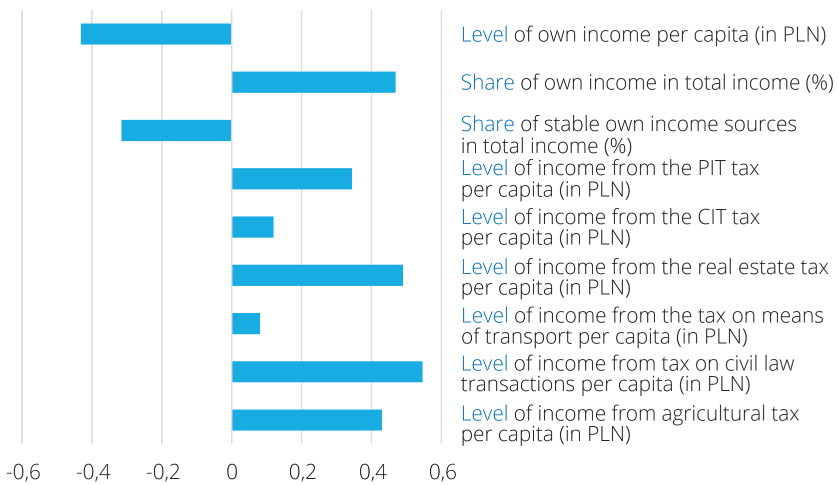
Specification	Class/Development level				In total
	I high	II medium higher	III medium lower	IV low	
Level of own revenue per capita (in PLN)	3147.7	2516.1	2238.9	2084.6	2357.1
Share of the own revenue in total revenue (%)	57.2	52.6	46.6	41.9	48.5
Share of stable sources of own revenue in total own revenue (%)	74.2	69.0	70.7	63.9	69.9
Level of revenue from PIT per capita (in PLN)	1162.8	1003.9	917.5	803.7	964.8
Level of revenue from CIT per capita (in PLN)	35.5	33.2	30.5	29.3	32.0
Level of revenue from real estate tax per capita (in PLN)	564.9	634.6	524.8	510.4	543.6
Level of revenue from the tax on means of transport per capita (in PLN)	19.9	15.7	21.7	23.1	20.5
Level of revenue from tax on civil law transactions per capita (in PLN)	62.0	44.8	36.3	29.4	41.8
Level of revenue from agricultural tax per capita (in PLN)	1.7	3.5	6.2	11.6	4.8

Source: authors' own elaboration based on data from the *Local Data Bank of Statistics Poland* [date of access: 9.06.2022].

An assessment of the existing quantitative relationships between the socio-economic situation and the level of own revenue potential of small towns with urban municipality status was carried out using Pearson's linear correlation coefficient (Chart 5). The empirical research carried out showed that there is an average relationship between the level of development of the studied towns/cities and their financial performance in terms of the analysed phenomenon. The strength of this relationship indicates the importance of not only the studied own revenue, but also of other sources, for the development of small towns. This may be due to the fact that the entities under study have large investment needs, and therefore the need to acquire substantial funds from various sources. For most of the studied indicators, the coefficient had positive values, indicating a directly proportional relationship between the variables, so increasing them will have a positive impact on development. Local authorities should therefore work to increase tax revenues, as these will provide investment opportunities, both by directly financing their implementation and indirectly by ensuring creditworthiness. Only the revenue from agricultural tax and tax on means of transport reduce development opportunities. This is because these revenues are higher in smaller towns with additional agricultural functions. Research has therefore shown that changing this function to a residential or industrial one provides the means to develop a small town.

CHART 5

Pearson's linear correlation coefficients between the values of the synthetic measure of the level of socio-economic development and indicators depicting the level of own revenue potential of small towns with urban municipality status in Poland in 2018–2020



Source: authors' own elaboration based on data from the *Local Data Bank of Statistics Poland* [date of access: 9.06.2022].

5. Conclusions

The financial condition of small towns, including the level of their own potential that determines their financial independence, translates not only into their development, but also into the development of the areas surrounding them and vice versa. The ability to generate stable sources of own revenue is one of the most important factors determining the current level of satisfaction of the needs of local communities, as well as identifying development opportunities and the competitive position in relation to other local government units.

The research carried out showed that small towns with urban municipality status in Poland are characterised by a lower level of own revenue and stable parts of it in comparison to urban municipalities in general and cities/towns with poviat status in particular. This demonstrates the relatively lower financial autonomy of these territorial units. It should be noted, however, that the disproportion in terms of the level of financial autonomy of small cities in relation to urban municipalities in general (excluding cities/towns with poviat status) is relatively small and was reduced during the period under review. Moreover, the group of territorial units covered by this analysis demonstrates the greatest (and growing) heterogeneity in terms of processes addressed in this paper. This can make it difficult to draw up a single strategy to improve this autonomy for all local authorities, as their different socio-economic situations and functions must be taken into account. The research additionally showed that in the collective of small towns with urban municipality status, territorial units with relatively poorer financial performance were predominant.

The increasing total own revenue and its stable components collapsed in 2020, while their share of total revenue was already decreasing from 2016. Particularly large decreases were recorded for the larger urban units. The deterioration of the revenue structure is due to several reasons beyond the control of local authorities. The system of transferring funds in the form of grants under the government's 500+ social programme is responsible for the beginning of this decline. In turn, the recession and lockdowns due to the COVID-19 pandemic were the cause of the significant deterioration in performance in 2020. In addition, the government aid provided to local authorities at the time in connection with the pandemic also constituted a grant and therefore an external source of revenue, affecting the value of the indicators of financial independence. Tax reforms lowering the base for calculating PIT and even exempting from it are also a key factor. This is all the more important given that shares of PIT, alongside real estate tax, are the most important sources of revenue analysed. It should be noted that ZUS (Social Insurance Institution) has taken over the payment of 500+ benefits in 2022, which will increase the share of own revenue in the total revenue of the territorial units under study.

In addition to exogenous determinants, endogenous ones are also important. Small towns with urban municipality status are diverse in their level of socio-economic development. Average levels were reported for the vast majority of the analysed towns/cities. This level has been shown to have an effect on the financial independence of small towns, although the strength of this relationship shows the importance for the development of not only the studied own revenue, but also other sources. Increasing own revenue will have a positive impact on development. Local authorities should therefore work to increase tax revenues, as these will provide investment opportunities, both by directly financing their implementation and indirectly by ensuring creditworthiness.

Successive tax changes (Polish Deal, Polish Deal 2.0), the unstable political situation in Europe and the economic situation in Poland do not inspire optimism. The rapidly changing environment also makes conducting comparable analyses difficult. It should be noted that the state of local government finances and, above all, own revenue, is the result of many decisions, primarily legislative, and a reflection of the economic situation in the country.

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