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Local government policy towards the financial instruments supporting entrepreneurship

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ABSTRACT

Objective: The objective of the article is to determine the scope of the use of financial instruments to support entrepreneurship by communes in Poland.

Research Design & Methods: The article is a quantitative study. The source of data was a survey carried out among Polish Local Government Units (LGUs). In the article several methods were used: descriptive statistics methods, variable classification and grouping, Pearson's chi-square coefficient, Cramer's V coefficient and comparative analysis.

Findings: The research results indicate that LGUs conduct inefficient fiscal policies. LGUs do not measure the results of their policies and do not address their activities oriented on entrepreneurship support well. As a result, one in five of the surveyed units was exposed to negative budgetary effects because of the policy on the tax on means of transport and more than every fourth one in relation to the real estate tax.

Implications & Recommendations: LGUs should diagnose local economic conditions in terms of individual needs and choose instruments that match the unique conditions of the local environment. LGUs should also pay more attention to measuring the effects of their activities in order to stop ineffective activities and reorient associated financial streams.

Contribution & Value Added: Due to the scope, multifacetedness and uniqueness of the collected data, the article is a significant added value in terms of recognizing the scope and diversity of LGUs' use of financial instruments to stimulate entrepreneurship in Poland. The undertaken topic related to the widespread problems with LGU financing is an important contribution to the discussion on strengthening the effectiveness of the financial policy of Polish LGUs.

Article type: research article

Keywords: entrepreneurship support instruments; financial support; local government units; local policy

JEL codes: H10, H30, L26

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INTRODUCTION

A local government unit's (henceforth LGU) responsibility for supporting entrepreneurship is the result of the decentralisation of public administration (Bartlett *et al.*, 2013) and related equipment of local governments with assets, sources of income and legal personality. Of all the solutions available to local governments to shape the local economic environment, financial solutions play a special role (Riedel *et al.*, 2020). Their introduction, however, should be well thought out and well adapted to the specificity of a given territorial unit, and at the same time skilfully applied (Gabe & Bell, 2004). The experience of LGUs' activities proves a kind of the universalisation of approaches in conducting development policies. Meanwhile, individually developed solutions to support entrepreneurship has the chance to strengthen development effects, reduce unnecessary expenditures on activities that do not translate

into support for entrepreneurship, and ultimately contribute to the visibility of local competitive advantages (Thurik, 2008). It is therefore necessary to identify patterns in entrepreneurship support policies conducted by LGUs that optimise the effects for economic development supported by instruments that individualise the potential of individual communal self-governments (Cheshire & Gordon, 1998). This problem is not sufficiently recognized, and it is best evidenced by incorrectly implemented local policies, which, often paid for by contributing to their development and implementation, do not bring expected results (Curran, 2000; Easson & Zolt, 2002).

This article aims to make a precise diagnosis of the scope of application communes of financial instruments for supporting entrepreneurship in Poland by communes. On this basis, the authors intend to indicate changes in the directions of local public policies that will make it possible to strengthen the effectiveness of the implemented financial instruments in supporting entrepreneurship.

The biggest value added of this article is presenting the results of the research on public entrepreneurship support policies implemented at the local level in a much more comprehensive and inclusive way than previous studies on this topic. Both the scope and size of the sample predispose the research presented in this article to be one of the most important and comprehensive in Poland. The article is cognitively valuable because its findings relate to the largest economy from CEE in the EU, a country that is an example of a successful systemic transformation. Hence, the conclusions contained in it may also be extended to other countries at a similar level of development and with similar systems of public finances. The article explores the issues of entrepreneurship support instruments applied by local government units, and fills the gap in the knowledge of the availability and scope of their use in local public policies. The implementation of the research goal will be carried out using the CATI survey method.

This article begins with an analysis of the literature and research results dedicated to the financial forms of entrepreneurship support used by local government units and the accompanying results. The research methodology part covers data sources, the method of their collection and the presentation of the research methods used by the authors in the article. The results and discussion part is a presentation and analysis of the results of the research carried out. The conclusions, on the other hand, provide guidance for policy makers to make the financial support instruments be used more effectively.

LITERATURE REVIEW

Financial instruments to support entrepreneurship are the object of research for many economists and public finance practitioners. At the same time, these studies often divide financial instruments into income and expenditure nature (Bruce *et al.*, 2019). Taxes, as instruments for supporting entrepreneurship, are examined in the works by Cullen and Gordon (2007), Gurley-Calvez and Bruce (2013), Holtz-Eakin (2000), and Gentry and Hubbard (2000). In turn, expenditure support for entrepreneurship is undertaken in works by, among others, Krichevskiy and Snyder (2015), Gabe (2001), as well as Sutaria and Hicks (2002) and Amorós *et al.* (2019).

The results of research presented in the works by the recognized authors lead to several conclusions. The first is the dominance of approaches based on a separate study of the use of the above-mentioned forms of support by local governments and the accompanying results (see Perska, 2014). Secondly, the attempts made by the authors to explain the issue of the instrumentalisation of entrepreneurship support by local government units are much more focused on examining individual instruments (e.g. preferences in property tax) and referring them to only one category of communes rather than on research including all types of local units in Poland (see Barej, 2011). As a result of the presented approaches to research in the literature, there is still a lack of knowledge about differences in the use of financial instruments due to the criterion of the commune's type category. At the same time, in the literature, the approach that differentiates the forms of support depending on whether they are dedicated to supporting entrepreneurship in rural areas, in cities or in intermediate places is considered important and cognitively valuable (Renski, 2008; Arauzo-Carod & Teruel-Carrizosa, 2005).

Considering the observations made, in the first stage of work on this article, financial instruments for supporting entrepreneurship available to local governments were identified and grouped (see Pergelova & Angulo-Ruiz, 2014; Lee *et al.*, 2017). Not all actions that can be taken by local governments

(i.e. be implemented) were listed, but the importance of those which - according to the results of the above-mentioned authors – in a real way contribute to the development of entrepreneurship, was emphasized (see Pahwa *et al.*, 2006). Table 1 is the result of literature studies.

Table 1. Financial entrepreneurship support instruments used by communes in Poland

Financial instruments of direct support (tax policy)	Financial instruments of indirect support (acquisition of investors and external funds)
1. Lease or sale of communal property to entrepreneurs intended for business activities; 2. Involvement of local authorities in financial support for entrepreneurs through preferential prices for communal services; 3. Applying preferential tax rates and tax breaks for new businesses; 4. Granting sureties and loan guarantees to entrepreneurs; 5. Establishing a micro-fund to support economic initiatives.	1. Conducting marketing activities, external advertisement of LGU; 2. LGU's support in finding spare lands or premises; 3. Involvement in legal and financial advice for entrepreneurs; 4. Provision of personalised service during business registration; 5. Using websites as means of disseminating information about LGU being a place for capital location; 6. Using informational and promotional materials about LGU in a foreign language; 7. Promoting LGU at foreign fairs; 8. Separation of a unit or position at the office dedicated to servicing foreign investors; 9. Location of a Special Economic Zone on LGU's territory.

Source: own study.

A comparison of possibilities of using instruments belonging to both groups in relation to local government units of different levels indicates the relative advantage of solutions based on public expenditure (Tödtling & Wanzenböck, 2003). These instruments (in vast majority) can be successfully used by all of the stages of decentralised governments, while income instruments based on local taxes are the domain of communal governments only (Parker, 2009). According to the applicable regulations, communes have limited tax authority. Paradoxically, the financial independence being the domain of communes may be its weapon but also the greatest weakness (Villela *et al.*, 2010; Bykov & Zimmermann, 2018). An improperly conducted tax expenditure policy results in significant threats to the budget stability, and thus the ability to undertake and conduct development activities. For example, Dziuba (2016) shows that the application of fiscal preferences reduces local budgets, and their scale varies depending on the type of taxes and the type of communes applying them. These effects are most noticeable in taxes on transport and real estate in urban communes. Moreover, the propensity to use tax instruments varies geographically. According to Filipiak (2016), in Poland these solutions are most often used by local government units in the south-east (Lublin Voivodship, i.e. less developed part of the country) and least often in the south-west (Silesian Voivodship, i.e. much more developed region of Poland). Similar conclusions are provided by Klun (2012) for Slovenia and by Morgenroth (2010) for Ireland.

An improperly conducted expenditure policy can also be a source of dangers to a local government's finances and thus the ability of communes to conduct effective entrepreneurship support policies (Prud'Homme, 1995). In Poland, examples of "bankruptcies" of communal self-governments due to excessive investment activity are known. The Ostrowice commune is worth mentioning. Similarly, there is a larger number of communes in Poland, i.e. Rewal and Dziwnów, Byczyna and Wałbrzych. This narrative fits the position of Holcombe and Williams (2009), who prove that one cannot speak of economies of scale as a result of increased budget spending at the local level. This fact justifies the discussion about the effectiveness of expenditure development support instruments for the local economy (Shen *et al.*, 2015; Solé-Ollé, 2006; Bayoumi, 1991). As it results from the presented examples, overinterpretation of the effectiveness of local government expenditures in stimulating the development of local systems can result in diametrically opposed effects (Primo, 2010).

Given that both tax and expenditure policies can have negative effects on the establishment of new firms, the question whether there are certain formulas in the structure of the instruments used that are appropriate for specific categories of local government units is justified. So far, only single attempts at cross-sectional studies showing the use of financial instruments to support entrepreneurship have been

made in literature. As a result, there is no complete and reliable diagnosis concerning the financial instruments used in particular types of LGUs, especially in the CEE countries, including Poland. This study, due to the range of instruments covered by the study, their addressing all types of LGUs and a large research sample, significantly contributes to filling the gap in the knowledge about the examined issue.

As a result of the presented approaches to research in the literature, there is still a lack of knowledge on determinants explaining the use of financial instruments by LGUs. The literature review allowed to assume the following research hypotheses:

H1: The use of financial instruments varies according to the category type of a commune.

H2: Communes do not analyse the budgetary consequences of the implementation of financial support instruments.

RESEARCH METHODOLOGY

The selection of units for the research sample was two-stage. In the first stage, purposeful selection was used – it involved communes that participated in the research carried out in 2015 by the scientific team as part of the project "Supporting entrepreneurship by local government at the commune level". In 2015, 735 communes participating in the Polish edition of the Global Entrepreneurship Monitor research project were surveyed. The idea was to combine data on attitudes and determinants of entrepreneurship in Poland (GEM) with research carried out by the scientific team.

In this study, 735 communes were examined using the CAWI method and about 383 correctly completed questionnaires were received. The contact details of the communes that had not responded were forwarded to the CATI studio altogether with 347 communes added from the database of all communes in Poland, so as to ensure a sample with the same structure as the actual structure of communes in Poland by type. After analysing the situation and the possibility of effective application, proportional stratified sampling was selected. This choice was determined mainly by the fact that it ensures high efficiency of the sample selection. In addition, dependent randomisation was used, i.e. without return.

The CATI research database consisted of 699 communes (352 with GEM and 347 randomly selected), of which 513 questionnaires were completed, 84 refusals were noted, and no contact was possible with 102 units. As a consequence, the study was conducted among 896 local government units, which resulted in the study of over 36% of the entire population, additionally, the structure of the units accepted for the study was consistent with the structure of the general population (by commune type). Despite the fact that some of the units accepted for research came from deliberate selection, by adding an appropriate number of communes of each type, the appropriate structure and size of the sample was ensured, and thus it can be considered that the research was representative.

This study on the use of entrepreneurship support instruments was carried out in the period of June – October 2019. The exact structure of the research sample of communes is presented below (Figure 1).

This part of the article analyses the differences between the type of commune and financial instruments of entrepreneurship support. To capture the diversity of support instruments, the chi-square factor and Cramer's V were calculated.

The following formula was used to calculate the variable chi-square.

$$\mathrm{X}^2 = \sum_{i=1}^{r} \frac{(n_i - np_i)^2}{np_i} \tag{1}$$

where:

X^2 - chi-square factor;

I_{ki} - sample size;

I_{vi} - number in the i-th class, n_i (i=1,…,r);

p_i - probability that a given random variable will take values from the i-th class.

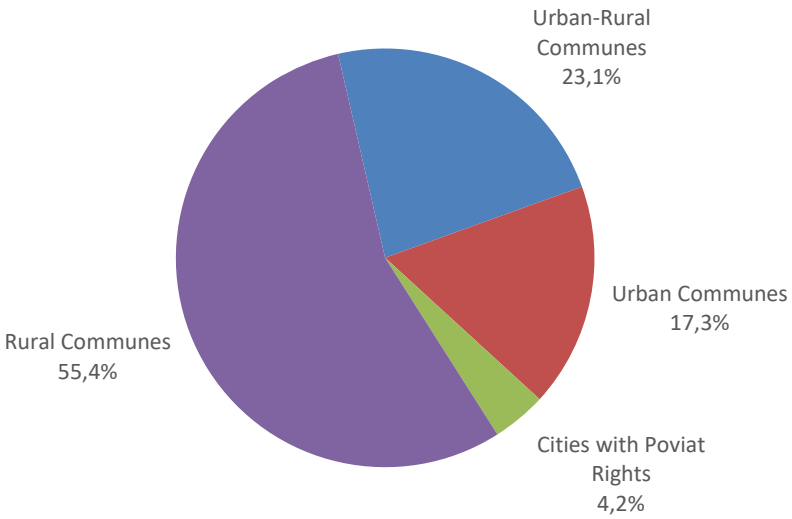

Figure 1. Structure of a sample according to the type of the local government unit
Source: own elaboration based on the results of the conducted research.

Cramer's V coefficient was calculated according to the formula.

$$V = \sqrt{\frac{X^2}{n \cdot min(l-1, k-1)}} \tag{2}$$

where:

V - Kramer's V coefficient;
X^2 - chi-square factor;
n - sample size;
l - number of levels of one variable;
$min(l-1, k-1)$ - smaller than values $(l-1)$ or $(k-1)$.

The determinant of the choice of the latter factor was the fact that the presence of support instruments and the type of local government units are variables presented on nominal scales, and this measure is used for such analysis. The chi-square test studies the independence of variables. If p <0.05, there is a relationship between variables, the difference is statistically significant (we reject the null hypothesis). If p> 0.05, then there can be no relationship between the variables studied, the difference is not statistically significant (there are no grounds to reject the null hypothesis). Therefore, the chi-square factor informs if the relationship exists, while the Cramer's V factor states the strength of the relationship between variables. When rejecting the null hypothesis, one should first pay attention to approximate significance. The value of the Cramer's V coefficient takes values from 0 to 1, the higher its value, the greater the strength of the relationship between the features. If the strength of the relationship is in the range:

- V <0.3 – the relationship should be defined as weak;
- 0.3 <V <0.5 – there is a moderate relationship;
- V> 0.5 – the relationship must be considered strong.

The collected source material was analysed with the use of PS IMAGO 5.1 PRO software.

RESULTS AND DISCUSSION

The first question in the questionnaire regarding financial instruments of entrepreneurship support to which respondents replied concerned the commune's involvement in financial support for entrepreneurs in the form of sureties, guarantees or loans. It turned out that fewer than 11% of communes use such tools (Table 2).

Table 2. Is the LGU involved in financial support for entrepreneurs (sureties, guarantees, loans)?

Variant of answer	Altogether	Urban commune	Urban-rural commune	Rural commune	City with poviat rights
Yes	10.9	20.0	12.6	5.8	31.6
No	81.1	71.0	77.3	88.5	47.4
I do not know	7.9	9.0	10.1	5.6	21.1
Altogether	100.0	100.0	100.0	100.0	100.0
chi-square tests					
Statistics		**Value**	**df**	**Asymptotic significance (2-sided)**	
Pearson's chi-square		62.751a	6	0.000	
Likelihood ratio		56.381	6	0.000	
[a] 16.7% of cells (2) has an expected number below 5. The minimum expected number is 3.01.					
Symmetrical measures					
Statistics			**Value**	**Approximate significance**	
Cramer's V			0.187	0.000	
N of significant observations			896	.	

Source: own elaboration based on the results of the conducted research.

Analysing the involvement of communes supporting entrepreneurship by individual types, it should be stated that these instruments are most often used by cities with poviat rights and urban communes. There is a relationship between two variables, i.e. the commune's involvement in financial support for entrepreneurs (sureties, guarantees, loans) and the type of commune, as evidenced by the chi-square analysis, however, the Cramer's V ratio of 0.187 indicates the weak strength of the relationship. The above analysis results should be considered to be in line with the expectations. Financial instruments such as sureties, guarantees or loans can be successfully used by entities with a sufficiently large budget and at the same time having appropriately sized economic entities interested in this type of support. Certainly, it is definitely easier to meet the above-mentioned conditions in the case of cities with poviat rights and urban communes than small LGUs with limited financial potential that prevents them from becoming involved in this type of support for economic activity.

In the next question, respondents were asked whether facilitations have been introduced in their communes for enterprises conducting business activity, i.e. in the form of preferential tax rates on means of transport and real estate (Table 3). Overall, over twenty percent of communes have introduced preferential tax rates on transport, and over twenty seven percent have preferential tax rates on real estate.

Table 3. Has the commune introduced facilities for enterprises conducting economic activity?

Variant of answer	Altogether	Urban commune	Urban-rural commune	Rural commune	City with poviat rights	Pearson's chi-square	Asymptotic significance (2-sided)	Cramer's V
1	20.6	27.7	19.8	18.8	21.1	21.018	0.002	0.108
2	27.1	40.6	31.9	19.6	44.7	58.563	0.000	0.181

Note: (1) preferential tax rates on means of transport, (2) preferential tax rates on real estate.
Source: own elaboration based on the results of the conducted research.

The analysis by the type of commune showed that when preferential rates on means of transport are used, the differences between the communes are not so immense. Fewer than twenty percent of communes are the highest share, while the worst situation is among rural communes - fewer than nineteen percent of these units use this instrument. On the other hand, preferential tax rates on real estate are used by almost forty-five percent of cities with poviat rights and only fewer than twenty percent of rural communes with an average of slightly higher than twenty-seven percent. Analysis by the chi-square test and symmetrical measures showed that there is a relationship between the character of the commune and preferential tax rates on means of transport and real estate. This relationship can be classified as weak, and thus, once again, research has proven that it is not the commune category that is the stimulus for using the above-mentioned forms of entrepreneurship support.

The relatively rare application of preferential tax rates on means of transport by communes may indicate that communes do not want to lose financial resources by lowering this tax rate, for many of them a serious source of budget revenues. The frequent use of preferential rates in real estate tax by urbanised communes rather than by rural communes may, in turn, prove that they are interested in attracting and locating corporate headquarters in their areas.

The idea of placing the next question in the questionnaire was to obtain information on tax breaks granted to new entrepreneurs (Table 4). The respondents had to choose "Yes", "No" or "I do not know".

Table 4. Does the commune grant tax breaks to new private enterprises?

Variant of answer	Altogether	Urban commune	Urban-rural commune	Rural commune	City with poviat rights
Yes	33.0%	45.8%	40.6%	24.2%	55.3%
No	46.0%	29.0%	38.6%	56.3%	21.1%
I do not know	13.1%	14.8%	15.5%	11.5%	13.2%
Altogether	100.0%	100.0%	100.0%	100.0%	100.0%
chi-square tests					
Statistics		**Value**	**df**	**Asymptotic significance (2-sided)**	
Pearson's chi-square		62.719 a	9	0.000	
Likelihood ratio		64.133	9	0.000	
a 12.5% of cells (2) has an expected number below 5. The minimum expected number is 3.01.					
Symmetrical measures					
Statistics			**Value**	**Approximate significance**	
Cramer's V			0.153	0.000	
N of significant observations			896	.	

Source: own elaboration based on the results of the conducted research.

One third of communes grant tax breaks to new private enterprises. Most often this instrument of supporting entrepreneurship is used by cities with poviat rights, urban communes and urban-rural communes. Chi-square analysis showed that there was a weak relationship between the variables tested. This situation confirms that factors other than the type of commune decide about the application or non-use of entrepreneurship support. It can be assumed that, while cities with poviat status and urban communes are predisposed to use this type of instruments, as there is a concentration of entities conducting economic activity on their territory, it does not preclude their use by smaller local governments, including rural communes.

The next stage of the analysis was to check whether communes provide / sell communal property to private entrepreneurs (Table 5).

Almost half of the communes share or sell communal property to private enterprises. A very small difference in this area is shown in the cross-section of the commune by category. Most often this instrument is used in urban and urban-rural communes. The Chi-square analysis showed that there is a low correlation between the variables, so the commune category of commune is not a sufficient explanation for using the instrument of sharing or selling communal property to private enterprises.

In the next stage of the research, respondents were asked which economic and financial tools are used by the commune (Table 6).

Out of the eleven economic and financial tools listed, the communes surveyed most often use two: the distribution of instalments for tax payment or tax arrears and the deferral of tax payment deadlines. The use of these instruments was indicated by more than half of all the surveyed communes. More than a third of communes use: preferential (lower than maximum) tax rates, tax breaks for entrepreneurs and the cancellation of tax arrears. Every fifth commune supports entrepreneurship through tax exemptions for entrepreneurs. The other tools are used much less frequently.

The chi-square analysis showed that there is a relationship between all the entrepreneurship support instruments and types of communes, however, the analysis using Cramer's coefficient requires that it is assessed at a low level. A relatively strong relationship was observed between the type of

commune variable: activities involving the inclusion of investment areas in the Special Economic Zone. There is a large variation among communes, as half of the cities with poviat status and one-third of urban communes have chosen this instrument. In the case of rural communes, only every twelfth commune have decided to do so.

Table 5. Does the commune provide/sell communal property to private companies?

Variant of answer	Altogether	Urban commune	Urban-rural commune	Rural commune	City with poviat rights
Yes	49.7%	63.9%	55.6%	42.3%	55.3%
No	19.2%	9.7%	16.4%	24.0%	10.5%
No, because there is no such property beyond the immediate needs of the administration	13.3%	12.9%	13.0%	13.7%	10.5%
I do not know	6.8%	1.9%	4.8%	9.5%	2.6%
No answer	11.0%	11.6%	10.1%	10.5%	21.1%
Altogether	100.0%	100.0%	100.0%	100.0%	100.0%
chi-square tests					
Statistics	**Value**	**df**	**Asymptotic significance (2-sided)**		
Pearson's chi-square	45.766a	12	0.000		
Likelihood ratio	48.314	12	0.000		
a. 10.0% of cells (2) has an expected number below 5. The minimum expected number is 2.59.					
Symmetrical measures					
Statistics	**Value**	**Approximate significance**			
Cramer's V	0.130	0.000			
N of significant observations	896	.			

Source: own elaboration based on the results of the conducted research.

Table 6. Which economic and financial tools are used by the commune?

Variant of answer	Altogether	Urban commune	Urban-rural commune	Rural commune	City with poviat rights	Pearson's chi-square	Asymptotic significance (2-sided)	Cramer's V
1	35.2	47.1	37.2	29.8	44.7	46.807	0.000	0.132
2	33.8	47.7	41.1	25.0	52.6	67.807	0.000	0.159
3	21.4	25.8	27.5	15.1	52.6	59.931	0.000	0.149
4	34.2	26.5	40.6	33.7	36.8	30.903	0.000	0.107
5	56.1	58.1	59.9	53.2	65.8	23.112	0.006	0.093
6	50.2	54.2	54.6	45.8	68.4	35.793	0.000	0.115
7	10.7	18.1	14.0	6.5	18.4	40.065	0.000	0.122
8	6.8	12.9	10.6	3.0	10.5	42.317	0.000	0.125
9	4.5	9.0	4.8	2.4	10.5	32.469	0.000	0.110
10	17.7	34.8	21.3	8.5	50.0	121.766	0.000	0.213
11	10.4	18.7	9.7	7.5	18.4	65.079	0.000	0.156

Note: (1) preferential (lower than maximum) tax rates, (2) tax breaks for entrepreneurs, (3) tax exemptions for entrepreneurs, (4) cancellation of tax arrears, (5) distribution of instalments for tax payment or tax arrears, (6) deferral of tax payment deadlines, (7) preferences regarding the determination of fees paid by entrepreneurs to the communal budget, (8) financial support in the form of sureties and guarantees, (9) financial support in the form of loans, (10) activities involving the inclusion of investment areas in the SEZ, (11) pricing policy instruments related to services.
Source: own elaboration based on the conducted research.

The next stage of the research was to find an answer to the question on which tools of a commune's economy are used in the process of supporting entrepreneurship (Table 7).

The tool most commonly used by the examined communes are fees for the use of areas, facilities and equipment owned by the commune, as well as sales (perpetual usufruct) and exchange of real estate of the commune. About nine out of twenty respondents chose these responses. Seven out of twenty

indicated the answers: detailed rules for the use of the commune property and pricing systems for the use of land and facilities owned by the commune. Adjacent fees are the least used. A relationship was observed between the answers to this question and the type of commune, although it was weak.

Table 7. Indicate which of the commune property management policy tools listed below are used in the process of supporting entrepreneurship

Variant of answer	Overall	Urban commune	Urban-rural commune	Rural commune	City with poviat rights	Pearson's chi-square	Asymptotic significance (2-sided)	Cramer's V
1	46.0	56.8	47.8	40.5	63.2	31.332	0.000	0.108
2	35.6	51.6	35.3	30.0	44.7	37.884	0.000	0.119
3	16.0	22.6	20.3	10.9	31.6	47.505	0.000	0.133
4	37.2	48.4	38.6	32.3	47.4	34.609	0.000	0.113
5	43.8	46.5	46.9	40.5	57.9	17.236	0.045	0.080

Note: where: (1) fees for the use of land, facilities and equipment owned by the commune, (2) price fixing systems for the use of land and facilities owned by the commune, (3) adjacency fees, (4) detailed rules for the use of commune property, (5) sale (perpetual usufruct) and exchange of real estate in the commune.
Source: own elaboration based on the conducted research.

A very important issue showing the awareness of the consequences of using entrepreneurship support instruments is whether the commune analyses the financial implications of its entrepreneurship support policy for the budget. This issue is presented in the Table 8.

Table 8. Does the commune analyse the financial consequences of the entrepreneurship support policy for the budget?

Variant of answer	Overall	Urban commune	Urban-rural commune	Rural commune	City with poviat rights
Yes	43.2	53.5	42.0	38.9	63.2
No	26.1	17.4	25.1	30.8	5.3
I do not know	16.7	11.0	20.8	17.3	10.5
No answer	14.0	18.1	12.1	12.9	21.1
Overall	100.0	100.0	100.0	100.0	100.0

chi-square tests			
Statistics	**Value**	**df**	**Asymptotic significance (2-sided)**
Pearson's chi-square	34.914a	9	0.000
Likelihood ratio	37.860	9	0.000
[a] 0.0% of cells (0) has an expected number below 5. The minimum expected number is 5.30			

Symmetric measures		
Statistics	**Value**	**Approximate significance**
Cramer's V	0.114	0.000
N of significant observations	896	.

Source: own elaboration based on the conducted research.

The research results indicate that only slightly more than forty-three percent of communes analyse the financial implications of their entrepreneurship support policy. If we extend the analysis to individual types of communes, it should be noted that such analysis is much more often carried out by cities with poviat rights and urban communes. The analysis also showed that there is a relationship between the studied variables, however, this relationship is at a low level.

CONCLUSIONS

In the literature focusing on the subject, research on the use of financial instruments to support entrepreneurship is fairly widely presented. Most often, however, the authors do not analyse a broad range of support instruments, their manner and effectiveness of use, but focus on the individual financial

instruments that stimulate entrepreneurship and analyse the effects of their use by local government units. The literature on the subject usually presents specific instruments supporting entrepreneurship and their consequences in relation to individual types of communes, which naturally narrows the view on the obtained research results and their applicability.

Local governments in Bulgaria can use the following financial instruments to support entrepreneurship: lowering local fees, investing in infrastructure, joint investments with the private sector and financial aid (providing guarantees, encouraging credit unions, etc.) (Damianova *et al.,* 2005). The Supreme Audit Office (NIK, 2018) presented in its report comprehensive research results concerning the supporting entrepreneurship policies conducted by Polish communes. This study covered 1 617 communes to which a questionnaire was sent and which was supplemented by the results of direct controls carried out among 48 communes located in 8 out of 16 Polish voivodeships. The NIK research showed that 81% of LGUs, when regulating the principles of property management, do not introduce concessions and reliefs for entrepreneurs, including fee discounts for renting and leasing real estate, while 65% of communes apply lower than maximum rates of property tax and tax on means of transport or introduce reliefs in these expenses. These analyses gave comparable results to those presented in this study. It is enough to recall that 20.6% of the communes surveyed by the authors use preferential rates of tax on means of transport and 27.1% of LGUs apply preferential rates on real estate tax. On the other hand, the results of research on offers of financial support for entrepreneurs in the form of sureties, guarantees and loans are in contradiction to the NIK's research. NIK reported that the communes did not prepare such solutions. In turn, the research presented in the following article indicates that about 11% of the surveyed communes use this form of support.

Research carried out in Macedonia (Zarezankova-Potevska, 2018) shows that around 30% of new enterprises have problems with access to sources of financing, as private financial institutions, i.e. banks, are not interested in providing such assistance. About 15% of entrepreneurs cannot find investors. It seems necessary to involve local governments to help in this field.

Many authors write about fiscal preferences consisting in reducing the rate of tax on means of transport and the rate of real estate tax. Swianiewicz *et al.* (2013) indicate that the property tax is closely related to the issues of entrepreneurship, because about 85% of revenues resulting from this tax are paid by entities conducting business activity (Swianiewicz *et al.,* 2013). Therefore, it is a tool strongly associated with enterprises and, much more importantly, numerous studies show that this instrument itself is not a decisive factor in initiating the activity or affecting its location. The predictability of the fiscal policy of LGUs, its stability, as well as the combination with other instruments stimulating local economic development have a much stronger impact. In the latter model, taxes are a complementary element and not the only one in the structure of business development stimulants.

The results of research carried out by Dziuba (2016), regarding the effects of introducing reduced rates in both of the above-mentioned taxes indicate that the most fiscally efficient local tax is real estate tax. It constitutes on average almost 12.5% of total communal revenues. However, the greatest effects of applying reduced rates were visible in the tax on means of transport, the revenues on which could be as much as 53% higher if this tool was not used (Dziuba, 2016). This finding draws attention to one more important issue - budgetary consequences of applying fiscal preferences. Their improper selection or their use as the only instruments to stimulate entrepreneurship on the one hand has no stimulus effect, and on the other hand it drains the budget by depleting the ability to effectively conduct entrepreneurship development policy. This fact is certainly one of the factors causing that the majority of local government units examined by Poniatowicz (2015) decide to apply maximum rates of real estate tax or rates close to the level of maximum rates. As demonstrated by her research, maintaining rates at a level definitely lower than the maximum does not significantly affect an increase in local investment activity (Poniatowicz, 2015).

Capkova (2005) argues that most taxes applied by local authorities are not a heavy burden for businesses. She believes that the use of preferential rates may not be economically viable. According to the author, companies are not guided by the issues of tax relief in their location decisions (Capkova, 2005).

The research results presented in this study indicate that one in five of the surveyed communes is exposed to negative budgetary effects and thus the weakening of real opportunities to stimulate economic development in the future, as regards the tax on means of transport, and more than every fourth

one in relation to the real estate tax. The obtained research results clearly show that LGU finances are crucial in stimulating local economy, but even more important is how limited financial resources are used by them. The results of the research show that not all of the local government units studied understand the problem that has been well presented in the article and, as a result, they take actions considered by them as "stimulus", whose effects will not be strongly associated with the dynamics of entrepreneurship. In order to understand this problem, it is required to examine the budget consequences of the actions taken, and unfortunately, these tasks are not implemented by communes (NIK, 2018).

The use of instruments supporting entrepreneurship by the local government units other than those presented in the study is relatively poorly described in the literature. The authors mention their existence and use, but do not undertake in-depth analyses of this issue. This opens up space for further research dedicated to the above-mentioned topics, recognizing this phenomenon and expanding knowledge on non-financial forms of entrepreneurship support.

REFERENCES

Amorós, J.E., Poblete, C., & Mandakovic, V. (2019). R&D transfer, policy and innovative ambitious entrepreneurship: evidence from Latin American countries. *The Journal of Technology Transfer*, *44*(5), 1396-1415.

Arauzo-Carod, J.M., & Teruel-Carrizosa, M. (2005). An urban approach to firm entry: The effect of urban size. *Growth and Change*, *36*(4), 508-528.

Barej, E. (2011). Znaczenie wydatków majątkowych w budowaniu konkurencyjności miast (na przykładzie wybranych miast województwa zachodniopomorskiego). *Folia Pomeranae Universitatis Technologiae Stetinensis. Oeconomica*, *65*, 7-16.

Bartlett, W., Malekovic, S., & Monastiriotis, V. (Eds.). (2013). *Decentralization and local development in South East Europe*. Springer.

Bayoumi, T. (1991). The Determinants and Efficiency of Local Authority Spending in England. *IMF Working Paper* No. 91/9, 1-30.

Braziewicz-Kumor, O., & Bury, P. (2011). Dochodowe instrumenty wspierania przedsiębiorczości stosowane przez samorządy gminne w województwie świętokrzyskim w latach 2004-2010. *Zeszyty Naukowe Wyższej Szkoły Bankowej w Poznaniu*, (38), 31-41.

Bruce, D., Glass, E.A., & Harris, M.C. (2019). On the effectiveness of state tax and expenditure policies to encourage entrepreneurship. *Journal of Entrepreneurship and Public Policy*, *8*(4), 523-548.

Bykov, S.S., & Zimmermann, H. (2018). Tax expenditure as a problem in intergovernmental relations. *Journal of Tax Reform*, *4*(1), 27-44.

Capkova, S. (2005). The Changing State of Local Government Summary and Conclusion. In S. Capkova (Ed.), *Local Government and Economic Development* (pp. 191-211). Budapest: Open Society Institute.

Cheshire, P.C., & Gordon, I.R. (1998). Territorial competition: some lessons for policy. *The Annals of Regional Science*, *32*(3), 321-346.

Chmielewska, B., Gospodarowicz, M., Ślązak, E., & Wasilewski, A. (2011). *Instrumenty polityki regionalnej i strukturalnej wspierające rozwój przedsiębiorczości na obszarach wiejskich*. Warszawa: Instytut Ekonomiki Rolnictwa i Gospodarki żywnościowej – Państwowy Instytut Badawczy, 47-101.

Cullen, J.B., & Gordon, R. (2006). Tax reform and entrepreneurial activity. *Tax Policy and the Economy*, *20*, 41-71.

Curran, J. (2000). What is small business policy in the UK for? Evaluation and assessing small business policies. *International Small Business Journal*, *18*(3), 36-50.

Damianova, A., Tzvetkovska, M., & Ivanov, S. (2005). *The Role of Local Government in Local Economic Development. Bulgaria. Local Government and Economic Development.* Budapest, Open Society Institute, 21-46.

Dębski, J. (2003). Lokalne bieguny wzrostu w Polsce (według budżetów gmin i przedsiębiorczości prywatnej). *Studies of the Industrial Geography Commission of the Polish Geographical Society*, *5*, 31-58.

Dziuba, J. (2016). Zróżnicowanie fiskalnych skutków polityki podatkowej jednostek samorządu terytorialnego. *Annales Universitatis Mariae Curie-Skłodowska, Sectio H Oeconomia*, *50*(1), 351-360.

Easson, A., & Zolt, E.M. (2002). *Tax incentives.* World Bank Institute.

Filipiak, B.Z. (2016). Skutki udzielania ulg, umorzeń i zwolnień przez organy podatkowe gmin. *Finanse, Rynki Finansowe, Ubezpieczenia*, *83*(5), 177-187.

Gabe, T.M. (2001). The effects of local taxes and spending on business startups. *Annual Meetings of the American Agricultural Economics Association in Chicago*, Illinois, August 5 – 8, 2001.

Gentry, W.M., & Hubbard, R.G. (2000). Tax policy and entrepreneurial entry. *American Economic Review*, *90*(2), 283-287.

Gurley-Calvez, T., & Bruce, D. (2013). Do tax rate cuts encourage entrepreneurial entry?. *Journal of Entrepreneurship and Public Policy*, *2*(2), 178-202.

Holcombe, R.G., & Williams, D.W. (2009). Are there economies of scale in municipal government expenditures?. *Public Finance and Management*, *9*(3), 416-438.

Holtz-Eakin, D. (2000). Public policy toward entrepreneurship. *Small Business Economics*, *15*(4), 283-291.

Inglot-Brzęk, E., & Skica, T. (2017). Zróżnicowanie efektów stosowania instrumentów wsparcia przedsiębiorczości przez samorząd terytorialny z uwagi na kryterium kategorii rodzajowej gminy. *Samorząd Terytorialny*, (*6*), 24-53.

Klun, M. (2012). *Tax expenditure analysis of Slovenian income taxes. Skrivena javna potrošnja: budućnost poreznih izdataka.* Zagreb: Institut za Javne Financije.

Krichevskiy, D., & Snyder, T. (2015). U.S. State Government policies and entrepreneurship. *Journal of Entrepreneurship and Public Policy*, *4*(1), 102-110.

Lee, S.H., Lim, E.S., & Hwang, J. (2017). Do credit guarantees for small and medium enterprises mitigate the business cycle? Evidence from Korea. *Empirical Economics*, *52*(4), 1367-1378.

Morgenroth, E. (2010). Regional dimension of taxes and public expenditure in Ireland. *Regional Studies*, *44*(6), 777-789.

Pahwa, S., Bester, J., van Nieuwenhuyzen, H., Dawood, G., Pieterse, D., Kane, K., & Van Eden, R. (2006). Impact of municipal regulations on SMMEs. *Development Policy Research Unit Working Paper* 06/107.

Parker, S.C. (2009). *The economics of entrepreneurship*. Cambridge, UK: Cambridge University Press.

Pergelova, A., & Angulo-Ruiz, F. (2014). The impact of government financial support on the performance of new firms: the role of competitive advantage as an intermediate outcome. *Entrepreneurship & Regional Development*, *26*(9-10), 663-705.

Perska, A. (2014). Wydatki inwestycyjne jednostek samorządu terytorialnego jako instrument wspierania przedsiębiorczości. *Przedsiębiorczość-Edukacja*, *10*, 285-294.

Poniatowicz, M. (2015). Determinanty autonomii dochodowej samorządu terytorialnego w Polsce. *Prace Naukowe Uniwersytetu Ekonomicznego we Wrocławiu*, (404), 245-264.

Porter, M.E., & Stern, S. (2001). Innovation: location matters. *MIT Sloan Management Review*, *42*(4), 28.

Prange, H. (2008). Explaining varieties of regional innovation policies in Europe*. European Urban and Regional Studies*, *15*(1), 39-52.

Primo, D.M. (2010). The effect of initiatives on local government spending. *Journal of Theoretical Politics*, *22*(1), 6-25.

Prud'Homme, R. (1995). The dangers of decentralization. *The World Bank Research Observer*, *10*(2), 201-220.

Renski, H. (2008). New firm entry, survival, and growth in the United States: A comparison of urban, suburban, and rural areas. *Journal of the American Planning Association*, *75*(1), 60-77.

Riedel, N., Simmler, M., & Wittrock, C. (2020). Local fiscal policies and their impact on the number and spatial distribution of new firms. *Regional Science and Urban Economics*, *83*, 103525.

Shen, W., Yang, S.C.S., & Zanna, L.F. (2015). Government spending effects in low-income countries. *IMF Working Paper* 15/286.

Solé-Ollé, A. (2006). Expenditure spillovers and fiscal interactions: Empirical evidence from local governments in Spain. *Journal of Urban Economics*, *59*(1), 32-53.

Supporting entrepreneurship by communes. 2014-2017, Supreme Chamber of Control, Warsaw (2018). Retrieved from https://www.nik.gov.pl/plik/id,17395,vp,19964.pdf on February 18, 2020.

Sutaria, V., & Hicks, D. (2002). The determinants of new firm formation dynamics. *42nd Congress of the European Regional Science Association: "From Industry to Advanced Services - Perspectives of European Metropolitan Regions"*, August 27th - 31st, 2002, Dortmund, Germany, European Regional Science Association (ERSA), Louvain-laNeuve.

Swianiewicz, P., Neneman, J., & Łukomska, J. (2013). Koncepcja przekształceń podatku od nieruchomości. *Finanse Komunalne*, 7-8, 25-50.

Thurik, A.R. (2008). Entrepreneurship, Economic Growth and Policy in Emerging Economies. *ERIM Report Series Research in Management*, (ERS-2008-060-ORG), 1-20.

Todtling, F., & Wanzenbock, H. (2003). Regional differences in structural characteristics of startups. *Entrepreneurship and Regional Development*, *15*(4), 351-370.

Villela, L., Lemgruber, A., & Jorratt, M. (2010). Tax expenditure budgets concepts and challenges for implementation, *IDB Working Paper Series*, No. IDBWP-131en, Inter-American Development Bank (IDB), Washington, DC.

Zarezankova-Potevska M. (2018). Most favorable financial instruments for entrepreneurship development. *ERENET Profile*, *XIII*(1), 42-51.

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Conflict of Interest

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