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THE REGIONAL DIFFERENTIATION OF FINANCIAL AUTONOMY OF POLISH COMMUNES

REGIONALNE ZRÓŻNICOWANIE SAMODZIELNOŚCI FINANSOWEJ POLSKICH GMIN

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Summary: The present article is devoted to the problems of financial autonomy of a commune (the Polish term – *gmina*), which are of crucial importance for the efficient and effective completion of public tasks assigned to local self-government units. The financial autonomy is understood as the freedom to shape revenues in relation to the level of expenditures incurred by the community during the completion of public tasks. The main aim of this article is to determine the level of financial autonomy of Polish communes as well as to examine whether there is a link between the level of socioeconomic development in a particular voivodeship (the Polish term – *województwo*) and the financial autonomy of the communes situated within their territory.

Keywords: local self-government, regional development, financial autonomy.

Streszczenie: Niniejszy artykuł został poświęcony problematyce samodzielności finansowej gminy, która ma kluczowe znaczenie dla sprawnej i efektywnej realizacji zadań publicznych nałożonych na jednostki samorządu terytorialnego. Przez samodzielność finansową rozumie się swobodę kształtowania dochodów odnoszącą się do poziomu wydatków ponoszonych przez gminę w związku z realizacją zadań publicznych. Głównym celem artykułu jest określenie poziomu samodzielności finansowej polskich gmin oraz zbadanie czy poziom rozwoju społeczno-gospodarczego poszczególnych województw ma związek z samodzielnością finansową gmin, które są na ich terenie zlokalizowane.

Słowa kluczowe: gmina, samodzielność, wskaźnik syntetyczny samodzielności finansowej, rozwój.

1. Introduction

Self-reliant and independent financial management of communes is an indispensable condition of their functioning. Self-reliance of activities in this area results primarily from the regulations contained in legal acts that resolve fundamental matters concerning

the functioning of communes, including their capacity to perform public tasks on their own behalf and responsibility, both in terms of revenues and expenditures. The autonomy understood in such a way is often perceived as tantamount to autonomy in general. The essence of financial autonomy is, to a large extent, determined by the scope of powers that local authorities possess in the area of their revenue policy, including tax policy, within a particular territory, as well as by the latitude to shape their budget expenditures and the budget balance. The processes related to financial management involve not only the areas connected with the actual cash flow execution, but also they are determined by the quality of financial management. At the same time, the processes related to the collection and allocation of financial resources of communes can be connected with the level of economic development of the regions in which these communes are situated.

The main aim of this article is to evaluate the level of financial autonomy of Polish communes and discover whether there is a relation between the level of socioeconomic development of particular voivodeships and the financial autonomy of the communes situated within their area.

The collected statistical data have been analyzed by means of basic methods aimed to synthetically describe individual figures as well as the methods used to do research on the interrelatedness between features of qualitative character. The initial analysis of the interrelatedness between those features made it possible to specify relationships, which in turn were analyzed in order to build the right aggregate measures to evaluate the level of financial autonomy of communes as well as the level of socioeconomic development of particular voivodeships.

The source of statistical data was the Local Data Bank. The data refer to the volume of revenues and expenditures of communes, their structure in relation to sources of revenue acquisition and categories of the incurred expenditures. On the basis of the data, a synthetic indicator of financial autonomy has been determined. From the point of view of achieving the research objectives, it was important to indicate the way in which particular variables describing the revenue and expenditure aspect of communes correlate with the level of economic development of in the voivodeships in which these communes are situated. The development level of voivodeships was determined with the help of a synthetic indicator calculated on the basis of arbitrarily selected variables that are used to evaluate the socioeconomic situation of particular regions.

The collected data refer to the period 2008–2013. In the case when the figures referring to some variables for a particular year were not available, their values were estimated on the basis of the analysis of tendencies concerning their development in the examined period. The analyzed range of time encompasses the period of a visible economic slowdown resulting from the world economic crisis.

2. Research methodology

The notion of the financial autonomy of self-government units is not defined unequivocally. Moreover, an unambiguous evaluation of the degree of the financial

autonomy of communes is difficult due to the fact that it can be considered on a number of different levels. We may distinguish, however, a set of basic indicators that reflect this level of autonomy in a synthetic way. The measures that have been used to evaluate the degree of financial autonomy are the following:

A) Budget indicators: structure of revenues and expenditures; dynamics of total revenues and self-generated revenues; 1st degree indicator of revenue autonomy = [(self-generated revenues – shares in taxes representing the state budget revenues *100)]/total revenues; 2nd degree indicator of revenue autonomy = (self-generated revenues*100)/ total revenues; dynamics of total expenditures, current and property expenditures; the expenditure autonomy indicator = [(self-generated revenues *100)]/ total expenditures; 2nd degree expenditure autonomy indicator = (self-generated revenues *100)/total revenues; operating result.

B) Indicators *per capita*: total revenues and self-generated revenues *per capita*; investment expenditures *per capita*.

The initial stage of the study involved the analysis of the above indicators. One of the main aims of such an evaluation was to obtain precise and consistent information concerning the level of financial autonomy of the Polish communes. After that we used the concept of the synthetic indicator [Nowak 1990, p. 89; 1995, p. 119] determined on the basis of the above presented partial indicators, standardized in such a way that they assumed the values from the [0,1] interval. A standardizing procedure of the following form has been used for that purpose:

A) for variables which are stimulants:

$$z_{ij} = \frac{x_{ij} - \min\{x_{ij}\}}{\max\{x_{ij}\} - \min\{x_{ij}\}}, \quad (1)$$

B) for variables which are destimulants:

$$z_{ij} = \frac{\max\{x_{ij}\} - x_{ij}}{\max\{x_{ij}\} - \min\{x_{ij}\}}, \quad (2)$$

where: x_{ij} is the value of the j -th variable for the i -th object (voivodeship).

On the basis of the variables transformed this way, we have determined their average value for the surveyed time period (\bar{z}) and their differentiation measured with the standard deviation (s_z). The higher the value of this indicator is, the higher the level of financial autonomy. Consequently, if communes had a score which was close to 0, it was equivalent to a lower level of financial autonomy, whereas the score closer to 1 was characteristic for the communes with a higher level of financial autonomy. The communes have been grouped with respect to the level of their financial autonomy according to the following scheme:

- Group I – a very high level of financial autonomy; this group includes the voivodeships in which the average value of the synthetic indicator for communes exceeded $\bar{z}_i > \bar{z} + s_z$;

- Group II – a high level of financial autonomy; this group includes the voivodeships in which the average value of the synthetic indicator for communes met the following formula $\bar{z} < \bar{z}_i \leq \bar{z} + s_z$;
- Group III – an average level of financial autonomy; this group includes the voivodeships in which the average value of the synthetic indicator for communes met the condition $\bar{z} - s_z < \bar{z}_i \leq \bar{z}$;
- Group IV – a low level of financial autonomy; this group includes the voivodeships in which the average value of the synthetic indicator for communes met the formula $\bar{z}_i \leq \bar{z} - s_z$.

While conducting indicator-based analysis, it should be remembered that indicators only describe the relationships between particular elements but they do not determine the reasons why a situation took place and because of that the indicators themselves are not sufficient to depict the real state of things. That is the reason why after the symptoms of phenomena taking place in communes have been identified, one should define the reasons behind them and only afterwards draw conclusions concerning the financial and economic situation of a commune. Due to that fact, we examined the relationships between the synthetic indicator of financial autonomy of communes and the synthetic indicator of socioeconomic development of the voivodeships in which particular communes are situated.

Nine variables that became the foundation of this synthetic indicator have been selected on the basis of literature studies [Tokarski, Stepień, Wojnarowski 2006, pp. 87–105; Stawasz 2012, pp. 501–508]. Among them, there were five variables which were regarded as stimulants of socioeconomic development and four which were regarded as its destimulants. They are the following:

A) stimulants of socioeconomic development: GDP *per capita*; gross average monthly pay; investment expenditures *per capita*; internal expenditures on research and development *per capita*; percentage of innovative enterprises in proportion to the total number of enterprises;

B) destimulants of socioeconomic development: rate of registered unemployment; percentage of the long-term unemployed (13 months and over); number of people obtaining social benefits per 10,000 inhabitants; number of people per 1 hospital bed in general hospitals.

The subsequent stages of the study were the same as in the case of the synthetic indicator of financial autonomy. The voivodeships grouped with respect to the level of their socioeconomic development included the following:

- Group I – leaders of development;
- Group II – the ones following the leaders;
- Group III – regions moderately developed;
- Group IV – regions poorly developed.

The subsequent stage of the research was to examine the relationships between the synthetic indicator of the financial autonomy of communes and the level of socioeconomic development of the voivodeships in which these communes are located.

In order to evaluate the relationship between the features, we used Spearman's rank correlation coefficient (r_{xy}), calculated as:

$$r_{xy} = 1 - 6 \cdot \frac{\sum_{i=1}^{16} d_i^2}{n(n^2 - 1)}, \quad (3)$$

where: d_i – the difference between the ranks (positions) that the value of the synthetic socioeconomic development indicator for a particular voivodeship assumes in an ordered statistical series and the value of the synthetic indicator of the financial autonomy of the communes situated in a particular voivodeship; n – the number of objects ($n = 16$).

This coefficient assumes values within the interval $[-1, 1]$, which means that it can be used to examine both the direction of the relationship between features as well as the strength of this relationship. As regards the strength of the relationship, the closer the value of this coefficient is to (-1) or (1) , the stronger the relationship is.

3. The research results

The overall analysis of the reports on the budget implementation of communes on the basis of fixed prices for 2013 indicates that there was an increase of total revenues from PLN 71,575.20 mn in 2008 to PLN 80,043.3 mn in 2013, which means that in the period 2008–2013 the real total revenues in communes increased by almost 11.83%. The most important factor of this rise was the increase of grants by almost 23.09%. The self-generated revenues increased by over 8.36%, whereas the revenues from subsidies – by 7.43%.

The freedom to shape the financial policy is secured by the adequate level of self-generated revenues. It should be the highest possible as thanks to it communes can freely use the components of their wealth, which in consequence leads to their stable development. In the period 2008–2013 the share of self-generated revenues in total revenues (the 2nd grade revenues-related autonomy indicator) made up about 45–49% annually. The highest share of self-generated revenues in total revenues was observed in communes situated in Dolnośląskie and Śląskie voivodeships, whereas the lowest share – in Lubelskie and Podkarpackie voivodeships.

Analyzing, in turn, the 1st grade revenues-related autonomy indicator calculated as the share of self-generated revenues minus tax revenues from PIT and CIT to total revenues, one can observe that during the whole period under study the highest value of this indicator was characteristic for the communes situated in Zachodniopomorskie and Dolnośląskie voivodeships (fluctuating between 37% and slightly over 40%). The lowest value of the indicator was characteristic for the communes located in Lubelskie and Podkarpackie voivodeships (21%–26%).

The biggest category among self-generated revenues of communes is their share in the taxes constituting the state budget revenues, which currently accounts for 32–37%.

Over the last six years, however, there has been a real decrease of 8% in their share in the income tax from legal persons and only a 3% increase in their share in the income tax from natural persons. Another important category of revenues is also constituted by the revenues from real property taxes, which increased by 21%. Real property taxes generate 12–14% of the overall revenues earned by communes every year.

A disturbing phenomenon in the period 2008–2013 was also a 14% fall of the incomes from capital, which in 2013 accounted for only 3.5% of total revenues. Communes have the biggest influence on the incomes from capital, primarily because of the fact that they can determine their structure with respect to both where and when they are allocated.

Other budget revenues of communes involve transfers. The share of grants and subsidies in total revenues of communes accounted for 20 and 30%, respectively. In the period under study revenues from subsidies increased by slightly over 7%. As far as subsidies are concerned, one can speak about a relative predictability of the revenues that they generate.

Apart from the revenues-related autonomy, a significant role in the activities of communes is played by the autonomy related to expenditures. It should be noted that according to the analysis carried out on the basis of current prices total expenditures of communes increased from PLN 62,892.7 mn in 2008 to PLN 79,442.5 mn in 2013, i.e. by slightly over 26%. If we take into account the inflation rate to make these numbers real, it will turn out that the real expenditures in 2013 as compared to 2008 increased by just 9%. The highest increase of total expenditures was observed in communes situated in Lubelskie and Podlaskie voivodeships. At the same time, analyzing the dynamics of changes in the volume of total expenditures in the border years of the examined time interval, we can observe that in that period current expenditures increased by 14.36%, whereas capital spending decreased by almost 12%.

Current expenditures constitute the major part of expenditures of local self-government units in Poland. The prevailing majority of expenditures in the current expenditures budget of communes are remuneration and remuneration-derived expenditures, which accounted for 60% in 2013. They are fixed expenditures that communes are obliged to incur as determined by law. In the period under study, the highest dynamics of growth among current expenditures was undoubtedly characteristic for the expenditures on debt servicing. On the one hand, this indicates that the activities of communes are increasingly financed with the use of repayable means; on the other hand, this means that communes have to spend increasingly higher means to service their growing debt. Additionally, the rate of change in the case of both remuneration and remuneration-derived expenditures as well as other expenditures, was also positive.

In the examined period the indicator of the expenditure-related autonomy fluctuated between 40.46% and 48.80%. The lowest value of the indicator was characteristic for the communes situated in Lubelskie (27.66%–37.01%) and Podkarpackie (30.14%–38.36%), whereas its highest value was observed in the communes of Dolnośląskie (49.94%–59.20%) and Śląskie (56.07%–61.59%). It is worth emphasizing that on

average the values of the indicator were higher in the times of a more favorable economic situation irrespective of a region in which the communes were situated.

In order to present a complete picture of the financial autonomy of communes it is also necessary to analyze the volume of revenues and expenditures as well as its dynamics calculated per one citizen. In the period under study, as it follows from the conducted calculations, the self-generated revenues of communes per one citizen increased from PLN 1,398.26 in 2008 to PLN 1,491.72 in 2013, i.e. by 6.68%. The increase of revenues per one citizen is almost identical as the corresponding figure related to current expenditures per one citizen.

The highest increase of self-generated incomes *per capita* was observed in the voivodeships of Podlaskie (16.46%) and Kujawsko-Pomorskie (14.55%). A considerable lower pace of increase refers to capital expenditures *per capita*, in real terms, they in fact decreased by 13.2%. Their highest decrease was observed in Pomorskie (20%) and Wielkopolskie (26%).

In order to evaluate the level of the financial autonomy of communes in the right way, we should analyze the difference between current revenues and current expenditures defined as the operating result. The operating result indicates whether a commune is able to cover its current expenditures with its current revenues. In the examined period communes in all voivodeships had a total operating surplus; its level amounted to PLN 9,361.39 mn in 2008 and PLN 7,340.44 mn in 2013, which is equivalent to a real decrease of 21%. The highest total operating surplus was observed in the communes of Mazowieckie – PLN 1,118.29 mn and Wielkopolskie – PLN 793.62 mn and – at the same time – they are the communes which observed the highest decrease of its volume of almost 30%. The lowest operating surplus was characteristic for the communes of Lubuskie – PLN 186.76 mn and Opolskie – PLN 196.54 mn. The lowest decrease of the operating surplus of 5% was observed in the communes of Dolnośląskie. The highest operating surplus calculated per one citizen was observed in the voivodeships of Mazowieckie and Pomorskie, whereas the lowest one – in the voivodeships of Opolskie and Podkarpackie.

On the basis of the above presented indicators, a synthetic indicator of the financial autonomy of communes has been calculated. The higher the volume of this indicator, the bigger the financial autonomy of the communes situated in particular voivodeships. Taking into account the average values of this indicator and following the already presented classification, we obtained the following division:

- Group I – communes situated in the voivodeships of: Mazowieckie, Dolnośląskie, Wielkopolskie;
- Group II – communes situated in the voivodeships of: Łódzkie, Pomorskie, Śląskie, Zachodniopomorskie;
- Group III – communes situated in the voivodeships of: Kujawsko-Pomorskie, Lubuskie, Małopolskie, Opolskie, Podlaskie, Świętokrzyskie;
- Group IV – communes situated in the voivodeships of: Lubelskie, Podkarpackie, Warmińsko-Mazurskie.

The calculations carried out allowed grouping voivodeships with respect to the level of their socioeconomic growth into the categories following the already presented classification:

- Group I: – Mazowieckie, Śląskie;
- Group II: – Dolnośląskie, Łódzkie, Małopolskie, Opolskie, Pomorskie, Wielkopolskie;
- Group III: – Lubelskie, Lubuskie, Podkarpackie, Podlaskie, Świętokrzyskie, Zachodniopomorskie;
- Group IV: – Kujawsko-Pomorskie I Warmińsko-Mazurskie.

Analyzing the volume of the Spearman rank correlation coefficient, one can conclude that there is a significant positive correlation between the financial autonomy synthetic indicator and the level of socioeconomic growth of the regions. That means that the communes situated in the voivodeships with the higher level of socioeconomic growth are financially more independent. It is worth observing, however, that the value of the rank correlation coefficient has been steadily decreasing. Its value amounted to 0.73 in 2008 and in 2013 – only to 0.43.

Conclusions

The conducted research confirmed territorial differentiation of communes as regards the level of their financial autonomy. It results primarily from the fact that the Polish system of local finance is highly centralized and it does not give local self-governments a guarantee of stable functioning. It is reflected in the unfavorable structure of their revenues, which predominantly consist of the state budget transfers. As a result, commune budgets are dependent on the state budget, which is equivalent to their loss of freedom to allocate acquired resources in the directions of their choice. Evaluating the financial autonomy of communes in the aspect of budget expenditures, one should emphasize that its connection with the socioeconomic growth of the voivodeships in which these communes are situated is irrelevant. This results mainly from the fact that the predominant part of these expenditures is current expenditures, which are fixed. To recapitulate, it should be emphasized once again that the issues discussed in the present article are of essential importance with respect to both the theory and practice. Financial autonomy is, in fact, a basis for the success of the process of decentralization of the public finance. The conducted research constitutes a contribution to a wider-ranging study of the problems related to the financial autonomy of local self-government units, which should be undertaken.

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