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## Financial Management in Municipality Local Governments Based on the Example of Income from the Real Property Tax and Investment Outlays

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**FINANCIAL MANAGEMENT IN MUNICIPALITY LOCAL  
GOVERNMENTS BASED ON THE EXAMPLE  
OF INCOME FROM THE REAL PROPERTY TAX  
AND INVESTMENT OUTLAYS**

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Key words: municipal governments, finance management, tax, investment.

A b s t r a k t

Despite limited independence of municipal governments and large unification of territorial government law a large polarization in their development is observed that results from the influence of different factors among which natural resources and geographic location of municipalities as well as exercising the rights based on the national law and competences of the people managing the municipalities are of major importance. The research problem undertaken in the analysis concerned first of all the municipalities finance management, particularly in the field of revenues obtained by municipalities from the real property tax and investment outlays. They represent instruments used by municipal bodies for local development management. Those issues were the base for formulation of the research hypothesis assuming that the volume of the municipality investment outlays, in particular those allocated to municipal infrastructure development, depends on the volume of revenues from the real property tax and that in term depends on the economic character of the municipality (tourist, agricultural).

**ZARZĄDZANIE FINANSAMI W SAMORZĄDACH GMINNYCH NA PRZYKŁADZIE  
DOCHODÓW Z PODATKU OD NIERUCHOMOŚCI I WYDATKÓW INWESTYCYJNYCH**

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Słowa kluczowe: samorząd gminny, zarządzanie finansami, podatek, inwestycje.

A b s t r a k t

Mimo ograniczonej samodzielności samorządów gminnych i unifikacji prawa samorządowego, obserwuje się dużą polaryzację ich rozwoju, będącą wynikiem oddziaływania różnych czynników, wśród których wielkie znaczenie mają warunki naturalne i położenie geograficzne gmin oraz

wykorzystanie uprawnień wynikających z prawa państwowego i kompetencje osób zarządzających gminami. Problem badawczy podjęty w analizie odniesiono przede wszystkim do zarządzania finansami gminnymi, szczególnie w sferze dochodów uzyskiwanych przez gminy z podatku od nieruchomości oraz wydatków inwestycyjnych. Stanowią one instrumenty wykorzystywane przez organy gminne do zarządzania rozwojem lokalnym. Kwestie te stały się podstawą do sformułowania hipotezy badawczej, zakładającej, że wielkość wydatków inwestycyjnych gminy, w tym szczególnie przeznaczonych na rozwój infrastruktury komunalnej, zależy od wielkości dochodów z podatku od nieruchomości, ta zaś zależy od charakteru gospodarczego gminy (turystycznej, rolniczej).

## Introduction

Establishment of territorial governments in Poland marked the beginning of formation of a new management model in the public sector (the state) based on decentralization of government administration powers that were transferred to territorial governments of municipalities, counties and voivodships. Referring to M. Armstrong it can be said that management in general, including management in the public sector aims at achievement of the intended results through the best possible use of human, financial and material resources available to the organization (AMSTRONG 1997). The territorial government is a fragment of the public sector and management in that dimension should aim at maximum use of all the resources of that organization, with particular focus of material resources (assets and funds) and the social potential of the local community. The disposers of budget funds, including territorial government bodies, should aim at the rational use of the financial resources available to the territorial government as well as effective management of municipal assets (KOWALCZYK 2008).

Management of the territorial government finance is the process of regulating and using the obtained current and investment activities financing sources in a way allowing attainment of goals and directions of activities accepted in the strategy and consistent with the specific characteristics of those units. That management encompasses taking financial decisions concerning performance of the tasks assuring quality and volume of goods and services supplied to the local community considering the effects within a specified time, future conditions and changing social needs (MACKIEWICZ et al. 2007). This covers all the activities involved in collection of revenues and performance of expenditures by territorial government units and their associations and a part of the general governance process (RUŚKOWSKI 2004). That is why, it must be subordinated to management of the entire organization (municipality) and aim at attainment of general goals accepted. As a consequence, the coordination of performance of activities in the financial field through appropriate monitoring and verification of resources and means are of fundamental importance for local development (KOZŁOWSKI 2000).

Despite limited independence of municipal governments and large unification of territorial government law a large polarization in their development is observed that results from the influence of different factors among which natural resources and geographic location of municipalities as well as exercising the rights based on the national law and competences of the people managing the municipalities are of major importance. The research problem undertaken in the analysis concerned first of all the municipalities finance management, particularly in the field of revenues obtained by municipalities from the real property tax and investment outlays. They represent instruments used by municipal bodies for local development management (KUDŁACZ 1994). Those issues were the base for formulation of the research hypothesis assuming that the volume of the municipality investment outlays, in particular those allocated to municipal infrastructure development, depends on the volume of revenues from the real property tax and that in term depends on the economic character of the municipality (tourist, agricultural)<sup>1</sup>.

For the purpose of diagnosing the research issue, performance of the objective of the research and verification of the hypothesis as well as obtaining answers to questions (research issues) the revenues from real property tax and investment outlays of municipalities in absolute and relative terms per capita as well as their share in total revenues and outlays were analyzed. Empirical studies were carried out in all 118 municipalities of Warmia and Mazury and the analysis covered the years 1996–2007.

## **Revenues from the real property tax in municipality revenues**

The real property tax is charged to all the residents and it represents, in case of large areas allocated to business activities, a significant item of costs of the enterprises and revenues of local budgets. Entrepreneurs search for municipalities decreasing tax rates and applying active methods for developing the volume of taxes from enterprises at different stages of development and of different financial standing. Revenues of municipalities investigated from the real property tax in some municipalities exceed one third of the total revenues and represent the amount compatible to the amounts of funding allocated to operation of local education. This, however, applies to the richest municipalities because in agricultural municipalities (Tab. 1), generating low revenues from the real property tax (e.g. Kiwity and Lelkowo – under 4%) the expenditures on education frequently exceed a half of the total expenditures. Revenues

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<sup>1</sup> The typology of the municipalities was done on the base of: Morze 2007., and *Rocznik Statystyczny Rolnictwa i Obszarów Wiejskich, 2007, Rolnictwo w 2006 r., 2007.*

Table 1

Ranking of encompassed municipalities according to the indicators of real property tax revenues  
– municipalities with the best and the worst results

Municipalities	Municipality name	Real property tax revenue per capita [PLN]	Real tax revenue share in total revenues [%]	Overall place in the ranking
Municipalities with the highest indicators	Giżycko	501.7	28.4	3
	Orzysz	499.0	21.9	5
	Pasym	317.8	19.8	9
	Stawiguda	473.8	18.4	10
	Jonkowo	311.8	18.8	11
	Gietrzwałd	330.2	17.9	13
	Lubawa	249.4	18.5	16
	Młynary	263.3	18.0	17
	Elbląg	285.4	16.9	18
	Olsztynek	268.1	17.6	18
Municipalities with the lowest indicators	Kiwity	56.4	3.8	230
	Lelkowo	66.8	3.9	226
	Kalinowo	60.4	4.2	225
	Kozłowo	55.2	4.3	225
	Sępól	60.6	4.3	223
	Lubomino	67.7	4.2	222
	Grunwald	69.0	3.9	221
	Janowiec Kościelny	67.4	4.5	219
	Budry	68.3	4.8	215
	Barciany	78.8	4.9	211
	Rozogi	82.0	4.7	211

Source: Own work.

of studied municipalities from the real property tax showed their significant polarization during the years 1996–2007, as in the municipalities obtaining the highest shares of revenues from the real property tax in total revenues (Giżycko – 28,4%; Orzysz – 21,9% and Pasym – 19,8%) that share is many times higher than in the municipalities with the lowest share of that tax. Among 10 municipalities with the highest shares of real property tax revenues in total revenues the tourist municipalities dominated (Giżycko, Orzysz, Pasym, Stawiguda, Gietrzwałd, Elbląg and Olsztynek). That group consists mainly of rural municipalities. Agricultural municipalities (Kiwity, Lelkowo, Grunwald, Lubomino, Kalinowo, Sępól, Kozłowo, Janowiec Kościelny, Rozogi and Budry), in which the share of real property tax revenues in total revenues did not exceed 5% while those revenues per capita were below PLN 80, dominated among the municipalities achieving the lowest shares of real property tax revenues. Among the municipalities with the highest real property tax revenues there are two agricultural municipalities (Jonkowo –

PLN 311,80 and Młynary – PLN 263,30), while among the municipalities with the lowest shares of the real property tax revenues there are no tourist municipalities.

In the municipalities analyzed no correlation between the tax rate levels and the share of real property tax share in the total municipality revenues was found. Many municipalities with the highest real property tax revenues assumed high real property tax rates on the area occupied by housing properties, e.g. Lubawa, Stawiguda, Pasym or Olsztynek. However, in some municipalities with low revenues from that tax high tax rates applied, e.g. in Kozłowo and Kiwity. It can be assumed that municipalities with the low share of real property tax revenues in total revenues more frequently assumed high real property tax rates in case of housing properties and land used for business activities than the municipalities achieving a high share of that tax in their revenues.

The analysis showed that the municipalities with the highest real property tax revenues obtain it mainly from land occupied for business activities (concentrations and large numbers of enterprises) as well as land used for non-agricultural purposes (mainly tourism – such revenues dominate in municipalities possessing high tourist values). Municipalities with the lowest revenues from that tax frequently established its rates at a high level discouraging entrepreneurs from establishing enterprises or registering business activities. In rural municipalities there are few possibilities of obtaining revenues from that source as a consequence of small areas covered by that tax as agricultural and forest taxes dominate there which are a small source of supply for the budget in terms of both the percentage and the amount.

### **Investment outlays of municipalities**

Investment outlays of municipalities consist first of all the of the outlays for municipal infrastructure construction and development, fixed assets purchase and capital investments (capital contribution to companies, purchase of shares, etc.). The investments determine the local development and are tightly correlated with own revenues level – the volume of investment outlays represents the compromise between the local needs and ability to satisfy them (DOLATA 2002). Outlays on own investments in the public sector decrease the financial resources of that sector simultaneously increasing its actual resources (MALINOWSKA, MISIĄG 2002). Investing municipalities are municipalities developing the bases for development, the municipalities that are interesting for entrepreneurs searching for improved land and developed municipal infrastructure. The municipalities studied are in most cases under-invested

municipalities with poor municipal infrastructure. This applies mainly to the road network, waste utilization plants, sewers network or educational infrastructure. That is why the investment activities of municipalities are particularly important for creating local development conditions in the region examined.

Among the analyzed municipalities achieving the highest ratios of the investment outlays share in total expenditures three rural municipalities are outstanding (Tab. 2), Stawiguda (33,4% of total expenditures), Biskupiec (Nowe Miasto county – 30,8%) and Gietrzwałd (29%). A high share of investment outlays was also recorded by municipalities of Lubawa (urban – 28,8%), Mikołajki (28,2%), Frombork (23%) and Łukta (22,8%). In this indicator

Table 2  
Ranking of municipalities covered according to the indicator of investment outlays – municipalities with the most favorable and the worst indicators

Municipalities	Municipality name	Investment outlays per capita [PLN]	Share of investment outlays in total expenditures [%]	Overall place in the ranking
Municipalities with the highest indicators	Stawiguda	820.8	33.4	2
	Gietrzwałd	552.5	29.0	5
	Biskupiec	502.6	30.8	6
	Mikołajki	520.4	28.2	8
	Lubawa	398.7	28.8	11
	Frombork	424.2	23.0	12
	Łukta	444.5	22.8	12
	Dywity	351.8	22.2	16
	Iława	340.3	22.1	22
	Janowiec Kościelny	330.0	21.6	25
Municipalities with the lowest indicators	Mitakowo	92.4	6.7	232
	Gronowo Elbląskie	99.2	6.7	230
	Godkowo	102.9	7.7	227
	Kolno	109.0	7.5	227
	Młynary	118.0	7.8	223
	Pieniężno	123.5	8.8	220
	Rychliki	125.6	8.6	220
	Kozłowo	116.0	9.2	218
	Korsze	127.3	8.9	216
Kętrzyn	134.3	8.8	214	

Source: Own work.

tourist municipalities dominate, there are no major towns and there are few rural municipalities. Among the municipalities spending the most on investments municipalities of Elbląg sub-region dominate (4), while the municipalities of Elk sub-region are the least numerously represented (1). The largest per capita investment outlays are those of the municipalities of: Stawiguda

(PLN 821), Gietrzwałd (PLN 552), Mikołajki (PLN 520) and Biskupiec (Nowe Miasto county – PLN 503). The municipalities that spend the most on investment outlays are also leaders in using the European Union funds. The leaders in that group are the municipalities of Stawiguda, Dywity, Elbląg (rural), Olecko and urban Lubawa and Iława.

The smallest share of investment outlays in total expenditures was recorded in the municipalities of Miłakowo and Gronowo Elbląskie (6,7%), Kolno (rural – 7,5%), Godkowo (7,7%), Rychliki (7,8%). Those outlays per capita amounted in the municipality of Miłakowo – PLN 92,40, Gronowo Elbląskie – PLN 99,20 followed by Godkowo – PLN 102,90 and Kolno – PLN 109. Among the municipalities using the least funds on investment outlays there are no tourist municipalities and urban municipalities while rural agricultural municipalities dominate.

Looking for correlations between the volume of real property tax revenues and the volume of investment outlays the Pearson's linear correlation coefficient was used and the correlation between the real property tax share in total and per capita revenues and the share of investment outlays in total and per capita expenditures. In the analysis of correlation between the issues studied the standard significance threshold was applied (Tab. 3).

Table 3  
Pearson's linear correlation coefficient for real property tax revenues and investment outlays in studied municipalities

Analyzed variables	Analyzed groups of municipalities	Pearson's linear correlation coefficient
Real property tax revenues per capita – investment outlays per capita	entire base	0,20
	urban	0,09
	urban-rural	0,17
	rural	0,50
	tourist	0,20
	agricultural	0,08
Real property tax revenue share in total revenues – share of investment outlays in total expenditures	entire base	0,26
	urban	0,57
	urban-rural	0,07
	rural	0,29
	tourist	0,40
	agricultural	0,03

Source: Own work.

The correlation analysis indicates higher correlations when the analysis tests the coefficients representing the shares of revenues and expenditures (0,26) than the per capita revenues and expenditures (0,20). The correlation analysis results indicate high correlation (0,57) between the share of real



property tax revenues share in total revenues and the share of investment outlays in total expenditures of urban municipalities in Warmia and Mazury. A relatively high percentage share of real property tax revenues in total revenues of urban municipalities results from high concentration of enterprises paying high taxes on the area used for business activities in towns. However, the linear correlation coefficient for those investments expressed in amounts of those financial instruments per capita does not indicate any correlation between them (0,09). This can be explained by the fact that in large towns the per capita share of investment outlays is low (Elbląg ranking 10<sup>th</sup> in the voivodship, Elk 33<sup>rd</sup> and Olsztyn 47<sup>th</sup>) despite high real property tax revenues per capita (Olsztyn ranking 19<sup>th</sup> in the voivodship, Elbląg 27<sup>th</sup> and Elk 32<sup>nd</sup>). Large towns, similar to rural agricultural municipalities allocate little funds to investments and at the same time obtain significant revenues from the real property tax. Large per capita revenues from the real property tax are obtained by rural (tourist municipalities in which the linear correlation coefficient was 0,50, characterized by large areas used for tourism related business activities and populated by relatively few residents.

Computations indicate high correlation between real property tax revenues per capita and investment outlays in tourist municipalities (0,54) as well as share of real property tax revenues in total revenues and share of investment outlays in tourist municipalities (0,40). Comparing the revenues of encompassed municipalities from the real property tax per capita and their share in the total revenues as well as investment outlays per capita and their share in total expenditures a high correlation was found between the analyzed parameters in tourist municipalities. The low correlation seems understandable in rural agricultural municipalities as they generate small real property tax revenues and at the same time their investment outlays are highly diversified. 16 rural agricultural municipalities achieve the real property tax revenues share in total revenues at under 5% while the share of investment outlays in total expenditures in case of some of those municipalities is more than 5 times larger (Janowiec Kościelny 4,5% to 21,6%; Rozogi 4,7% to 20,4%). Among the municipalities generating the highest shares of real property tax revenues in total revenues the share of investment outlays is at 18,4% to 33,4% in Stawiguda, 17,9% to 29% in Gietrzwałd and 18,5% to 28,8% Lubawa municipalities. Nevertheless, this is not the relation applicable in case of the majority of municipalities considered here to be those achieving the most or the least favorable results. In some municipalities (and this is not an exceptional phenomenon), the share of real property tax revenues in the budget is many times lower than the share of investment outlays while those municipalities are classified as achieving very good development indicators during the period covered (the share of investment outlays there exceeds 25%). The rural

agricultural municipality of Biskupiec (8,1% to 30,8%) and Kowale Oleckie (6,9% to 20,8%) as well as municipalities of Jeziorany, Rozogi and Młynary (ca. 5% to 20%) can be classified as such.

The Pearson's correlation coefficient for real property tax revenues share in the total revenues and the share of investment outlays in total expenditures in the studied municipalities during the years 1996–2007 shows a minor correlation between those variables. This means that municipalities generating high amounts of revenues from the real property tax spend more on investments. However, in those municipalities, in per capita terms, the coefficient of correlation between the real property tax revenues and investment outlays reaches lower values. In case of the individual groups of municipalities the Pearson's correlation coefficients represent different values.

## **Conclusion**

The rural tourist municipalities achieve relatively high real property tax revenues and have high shares of investment outlays in total expenditures. Among the tourist municipalities there are also municipalities ranked on further positions in rankings of real property tax revenues and investment outlays (they achieve results worse even than the agricultural municipalities). Similarly, among the rural municipalities we can find municipalities that achieve higher real property tax revenues and make higher investment outlays than many tourist municipalities.

The studies on the correlation between real property tax revenues and investment outlays showed that such correlation exists in tourist municipalities with a relatively small number of residents that generate the highest real property tax revenues per capita. In those municipalities large areas of buildings and land is used for business activities, particularly related to tourism. In rural and rural tourist municipalities there is a high correlation between real property tax revenues and investment outlays per capita. Also in urban and urban tourist municipalities there is a high correlation between the share of real property tax revenues in the total revenues and the share of investment outlays in total expenditures.

The results of studies indicate that in a large number of municipalities the volume of funds obtained from the real property tax has no influence on the volume of investment outlays. Large towns spend relatively less on investments than small rural municipalities in relation to the revenues generated from the real property tax. There are also many examples of rural agricultural municipalities that spend relatively more funds than suggested by the volume of funds generated from the local sources, in particular the real property tax.

Those municipalities frequently use the opportunity of obtaining funds from funds available to the municipalities generating the lowest per capita revenues from the local sources.

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