

**FINANCIAL STANDING OF COUNTIES  
IN THE WIELKOPOLSKIE PROVINCE  
IN THE YEARS 2004-2006**

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**Abstract.** The article presents a selection of indexes describing financial standing of local government units based on counties of the Wielkopolskie province. On the basis of their values analysed local government units were classified using Ward's method to form classes with a similar financial situation.

**Key words:** financial standing, counties, Ward's method

**INTRODUCTION**

An important element in the management of a local government unit is the management of its finances. It should be done in a rational and efficient manner and facilitate the realization of a long-term development strategy. Appropriate management of financial resources is one of the key pre-requisites of success for a local government unit and its quality affects not only the financial result of this unit, but first of all the degree to which needs voiced by the local community are going to be satisfied [Filipiak 2004]. Observed problems with timely settlement of liabilities may lead to a situation when obligatory tasks are no longer realized, which may undermine trust in the local government unit as a public subject [Gonet 2008].

Efficiency of financial management may vary greatly, even at identical resources, thus the decision-making process plays such a significant role. Financial analysis constituting one of the functions of resource management is a tool aiding decision-makers in this process. This analysis includes financial aspects of actions performed by local government organs, i.e. expenses, costs, revenues and income, cash flows, financial economy and liquidity [Dylewski et al. 2004].

The aim of the article is to assess the financial situation of counties in the Wielkopolskie province in the years 2004-2006.

## MATERIALS AND METHODS

The study used data of the Central Statistical Office (Regional Data Bank) and the Ministry of Finances (Index analysis of local government units in the years 2004-2006: counties). These data were used to classify counties of the Wielkopolskie province in terms of their financial standing. A total of 31 land counties were analysed (municipal counties were excluded from the analysis due to their unique character). The classification of analysed units was conducted in the course of the following stages [Wysocki and Lira 2005]:

1. Selection of variables describing financial standing of counties.

Based on factual data a set of variables was proposed, which is presented in Table 1.

Table 1. A list of variables used to investigate financial standing of counties  
Tabela 1. Zestawienie zmiennych przyjętych do badania sytuacji finansowej powiatów

Denotation of variable Oznaczenie zmiennej	Definition of variable Określenie zmiennej
1	2
X1 – Income X1 – Dochody	total income per capita (PLN) dochody ogółem na 1 mieszkańca (zł)
X2 – Own resources X2 – Środki własne	own income per capita (PLN) dochody własne na 1 mieszkańca (zł)
X3 – WSWI	primary income independence index calculated as a proportion of own income in total income (%) wskaźnik samodzielności wydatkowej I stopnia obliczany jako udział dochodów własnych w dochodach ogółem (%)
X4 – Subsidies X4 – Dotacje	the proportion of grants from the national budget in total income (%) udział dotacji celowych z budżetu państwa w dochodach ogółem (%)
X5 – WSWII	secondary income independence index calculated as the proportion of own income and total subsidies in total income (%) wskaźnik samodzielności wydatkowej II stopnia obliczany jako udział dochodów własnych i subwencji ogólnej w dochodach ogółem (%)
X6 – Taxes X6 – Podatki	the proportion of individual and corporate income taxes in own income (%) udział podatków od osób fizycznych i od osób prawnych w dochodach własnych (%)
X7 – Expenditure X7 – Wydatki	total expenditure per capita (PLN) wydatki ogółem na 1 mieszkańca (zł)
X8 – Salaries and wages X8 – Wynagrodzenia	the proportion of salaries and wages and derivatives in current expenses (%) udział wynagrodzeń i pochodnych w wydatkach bieżących (%)
X9 – Property expenses X9 – Wydatki majątkowe	the proportion of property expenses in total expenses (%) udział wydatków majątkowych w wydatkach ogółem (%)

Table 1 – cont. / Tabela 1 – cd.

1	2
X10 – Investments X10 – Inwestycje	investment expenses per capita (PLN) wydatki inwestycyjne na 1 mieszkańca (zł)
X11 – Liabilities X11 – Zobowiązania	the proportion of total liabilities in total income (%) udział zobowiązań ogółem w dochodach ogółem (%)
X12 – Repayments X12 – Spłata	the proportion of principal repayments and interest repayments in total income (%) udział spłat rat kapitałowych i odsetek w dochodach ogółem (%)
X13 – WPFI	primary financial liquidity ratio calculated as a quotient of total income and revenues to total expenditure, disbursement and outstanding liabilities wskaźnik płynności finansowej I stopnia obliczany jako iloraz dochodów ogółem i przychodów do wydatków ogółem, rozchodów oraz zobowiązań wymagalnych
X14 – Income/expenses X14 – Dochody/wydatki	the rate of coverage of total expenses by total income (%) stopień pokrycia wydatków ogółem dochodami ogółem (%)
X15 – Surplus X15 – Nadwyżka	the proportion of operating surplus in current income* (%) udział nadwyżki operacyjnej w dochodach bieżących* (%)

\*Operating surplus is calculated as a difference between current income and current expenditures. Current income is understood as budgetary income not being property income, which includes subsidies and resources granted for investments, income from sale of property, income from the transformation of perpetual usufruct right into property right [Analiza wskaźnikowa... 2008].

Source: the author’s study based on: Dylewski et al. [2004], Jastrzębska [2004].

\*Nadwyżka operacyjna jest obliczana jako różnica między dochodami bieżącymi a wydatkami bieżącymi. Przez dochody bieżące rozumie się dochody budżetowe nie będące dochodami majątkowymi, do których zalicza się: dotacje i środki otrzymane na inwestycje, dochody ze sprzedaży majątku, dochody z tytułu przekształcenia prawa użytkowania wieczystego w prawo własności [Analiza wskaźnikowa... 2008].

Źródło: opracowanie własne na podstawie: Dylewski i in. [2004], Jastrzębska [2004].

In order to eliminate excessively correlated variables, an inverse matrix was established for correlation coefficients between assumed variables. On the basis of the analysis of diagonal elements of the matrix three variables were eliminated from further investigations: X1, X5 and X10. Coefficients of variation were also included in statistical analysis. Due to the slight diversification (constant variation), further variables, i.e. X8, X13 and X14, were rejected. As a result 9 characteristics were included in further investigations, as they were considered stimulants of financial situation of counties, except for X11 and X12 (nominants) and X4 (a destimulant) (Table 2).

2. Normalization of values for diagnostic variables – it consisted in the transformation of nominants and destimulants into stimulants and in bringing values of variables to comparability, using the unitarization procedure, based on the following formulas:

$$\text{for stimulants: } z_{ik} = \frac{x_{ik} - \min_i \{x_{ik}\}}{\max_i \{x_{ik}\} - \min_i \{x_{ik}\}}, \quad (i=1,2,\dots,n; k=1,2,\dots,m)$$

$$\text{for nominants: } z_{ik} = \frac{x_{ik} - \min_i \{x_{ik}\}}{\max_i \{x_{ik}\} - \min_i \{x_{ik}\}}, \quad x_{ik} \leq \max_i \{x_{ik}\}$$

Table 2. Basic statistics of variables describing financial situation of counties in the Wielkopolskie province in the years 2004-2006

Tabela 2. Podstawowe statystyki zmiennych opisujących sytuację finansową powiatów województwa wielkopolskiego w latach 2004-2006

Characteristic Cecha	Minimum	Median	Maximum Maksimum	Coefficient of variation Współczynnik zmienności
Own resources Środki własne	111.04	152.52	224.97	17.74
WSWI	20.24	28.07	53.61	33.49
Subsidies Dotacje	3.32	15.37	25.37	21.55
Taxes Podatki	29.43	45.57	64.29	15.06
Expenses Wydatki	314.88	639.25	815.07	18.50
Property expenditure Wydatki majątkowe	5.17	10.26	20.19	35.30
Liabilities Zobowiązania	0.00	12.49	33.70	74.04
Repayment Spłata	0.00	2.49	11.24	82.12
Surplus Nadwyżka	-1.62	6.84	14.97	50.19

Source: the authors' calculations based on data of the Ministry of Finances and the Central Statistical Office 2008.

Źródło: obliczenia własne na podstawie danych Ministerstwa Finansów oraz GUS z 2008 roku.

$$z_{ik} = \frac{\max_i \{x_{ik}\} - x_{ik}}{\max_i \{x_{ik}\} - \text{nom}\{x_{ik}\}}, \quad x_{ik} > \text{nom}\{x_{ik}\}$$

$$\text{for destimulants: } z_{ik} = \frac{\max_i \{x_{ik}\} - x_{ij}}{\max_i \{x_{ik}\} - \min_i \{x_{ik}\}}, \quad (i = 1, 2, \dots, n; k = 1, 2, \dots, m)$$

where:

$\max_i \{x_{ik}\}$  – maximum value of the  $k$ -th characteristic,

$\text{nom}\{x_{ik}\}$  – nominal value of the  $k$ -th characteristic<sup>1</sup>,

$\min_i \{x_{ik}\}$  – minimum value of the  $k$ -th characteristic.

3. Cluster analysis by Ward's method, consisting in combining closest units in order to generate one cluster. The analysis of variance is used to estimate distances between units aiming at minimization of sum squares for deviations within clusters [Stanisz 2007]<sup>2</sup>.

<sup>1</sup> The value of a median was assumed as the nominal value for all analysed units.

<sup>2</sup> The computer software Statistica ver. 7.1 was used in the computation process.

**EVALUATION OF FINANCIAL STANDING OF COUNTIES  
BASED ON PARTIAL INDEXES**

The objective of income policy of any local government unit is to provide adequately high resources required for the realization of assumed tasks [Bury 1999]. Local governments may use their own income and supplementary income, comprising subsidies and total grant. Their own resources should constitute the main part of budgetary income as they can freely use them [Świrska 2008]. A measure of this freedom is the primary income independence index. A higher level of this index means higher financial independence of the local government. Areas most financially independent of the state budget were concentrated around towns with county rights, i.e. the Poznań (53.61%), Kalisz, Konin, Leszno and Szamotuły (over 32%) counties (Table 3). This independence was also confirmed by the relatively low percentage of subsidies from the state

Table 3. Values of variables describing financing standing of counties in the Wielkopolskie province in the years 2004-2006 (median values)

Tabela 3. Wartości zmiennych opisujących sytuację finansową powiatów w województwie wielkopolskim w latach 2004-2006 (wartość mediany)

County Powiat	Variable describing financial standing of a county Zmienna opisująca sytuację finansową powiatu								
	own re- sources środki własne	WSWI	subsi- dies dotacje	taxes podatki	expenses wydatki	property expendi- ture wydatki mająt- kowe	liabili- ties zobo- wiązania	repay- ment spłata	surplus nadwyż- ka
1	2	3	4	5	6	7	8	9	10
Chodzież	202.85	30.04	15.72	38.92	748.85	11.75	4.77	2.07	8.49
Czarnków- -Trzcianka	157.03	20.24	25.26	40.14	796.52	6.32	12.61	11.24	3.17
Gniezno	150.51	24.07	12.20	46.94	664.30	7.68	8.59	2.49	6.84
Gostyń	171.36	28.05	20.66	44.26	727.76	13.59	12.81	3.45	9.74
Grodzisk	134.22	29.30	11.94	50.82	479.69	13.20	11.71	1.64	9.64
Jarocin	126.87	23.90	16.01	45.26	714.66	15.61	16.42	1.71	7.42
Kalisz	118.51	38.77	9.29	48.90	314.88	9.92	17.10	6.42	7.23
Kępno	150.93	27.98	16.65	50.23	594.76	10.26	13.14	3.51	6.87
Koło	141.31	26.07	14.79	45.07	591.86	7.67	4.53	1.49	7.03
Konin	111.04	33.45	18.94	51.02	399.80	12.10	3.63	2.77	10.69
Kościan	150.87	30.28	17.82	48.60	537.81	19.01	8.28	0.64	10.5
Krotoszyn	133.20	21.98	16.90	45.57	639.25	8.53	18.80	6.17	4.31
Leszno	136.18	32.65	3.32	44.74	662.38	12.43	14.25	0.95	10.70
Międzychód	224.97	28.82	23.19	34.17	677.74	6.21	0.00	0.00	6.66

Table 3 – cont. / Tabela 3 – cd.

1	2	3	4	5	6	7	8	9	10
Nowy Tomyśl	153.57	31.92	9.90	55.74	508.99	5.17	1.26	1.17	5.12
Oborniki	134.15	25.56	12.10	51.11	545.92	7.94	33.70	5.18	3.63
Ostrów	152.52	28.14	13.76	53.61	617.35	9.83	8.21	2.76	4.03
Ostrzeszów	183.69	26.79	24.16	36.09	724.01	5.49	1.97	1.03	5.73
Piła	213.50	31.70	16.95	52.65	724.42	8.37	1.23	0.80	5.72
Pleszew	181.38	24.14	25.37	29.43	815.07	14.65	33.39	6.19	3.16
Poznań	205.21	53.61	8.86	64.29	525.40	20.19	12.01	1.72	14.97
Rawicz	157.90	28.14	23.13	42.63	469.56	12.29	0.18	0.16	7.99
Słupca	151.54	22.99	22.70	37.65	700.35	6.66	17.82	4.82	3.92
Szamotuły	187.41	32.41	15.19	48.50	481.10	13.49	0.00	0.00	13.85
Środa	175.17	29.81	14.06	52.66	656.46	9.94	14.30	5.07	-1.62
Śrem	176.41	28.07	18.14	44.53	638.02	10.60	12.49	3.51	5.55
Turek	163.05	28.45	15.37	48.67	659.90	6.15	13.82	2.75	3.86
Wągrowiec	136.64	21.23	10.58	42.15	663.54	16.39	17.06	2.43	8.75
Wolsztyn	176.49	26.31	15.06	43.72	700.45	12.12	7.37	1.59	7.73
Września	144.17	26.90	11.92	48.21	611.01	10.05	14.53	3.86	2.78
Złotów	130.59	22.78	11.49	40.36	585.42	11.77	13.12	2.90	6.03

Source: the authors' study based on data of the Ministry of Finances and the Central Statistical Office 2008.

Źródło: opracowanie własne na podstawie danych Ministerstwa Finansów oraz GUS z 2008 roku.

budget in the total income of these units (less than 10%) (except for the Szamotuły and Konin counties). The highest levels of capital grants were recorded in the Pleszew, Czarnków-Trzcianka and Ostrzeszów counties (almost 25%), which reported their share of their own resources to be below average. A high percentage of supplementary income, as it was indicated by Kańduła [2005], is not conducive of improving the efficiency of own income. The level of resources generated by sources found in a given local community, as own income is frequently defined<sup>3</sup>, at the same time constitutes an indicator of attractiveness of a given local government unit [Dylewski et al. 2004]. The volume of own income per capita was highest in the years of analysis in the Międzychód, Piła, Poznań and Chodzież counties (over PLN 200). In the local governments of Międzychód and Chodzież this resulted from their relatively small population, whereas in the other counties recorded results indicated good financial condition of local governments. Despite high population density the Poznań and Piła counties recorded relatively high levels of own resources per capita, which confirms considerable attractiveness of these areas. In turn, the lowest own income per capita was found in local gov-

<sup>3</sup> This definition is also supplemented to include the condition to have income at the disposal of local governments for an indefinite period and as a whole amount [Denek 2001].

ernments of Konin and Kalisz (below PLN 120). It might have been connected with a relatively high number of inhabitants in these counties.

As it has been already mentioned, own income plays a crucial role in financial independence. However, its range varies for individual elements comprising own income. In case of their contribution to budget revenue, i.e. individual or corporate income taxes, local governments have no authority. They may only aim at the improvement of their efficiency by stimulating economic activity [Kańduła 2003]. In every second analysed unit the proportion of income taxes in own resources was more than 45% (Table 2). The highest value of the discussed indicator was observed in the Poznań county, which results from high activity of economic entities, while it was two times lower (minimum) in the Pleszew and Międzychód counties (Table 2 and 3). It also needs to be stressed here that a high share of income taxes in own income is concurrent with a high proportion of own resources in total budgetary revenue<sup>4</sup>. This proves a tremendous role of tax sources in the generation of own financial resources of counties.

Simultaneously with income policy, expense policy is also conducted. The volume of expenses per capita (especially investment expenditure) is one of the measures evaluating attractiveness of local government units [Dylewski et al. 2004]. In the analyzed period the Pleszew (PLN 815.07) and Czarnków-Trzcianka counties (PLN 796.52) spent most, while the Kalisz (PLN 314.88) and Konin counties (PLN 399.80) spent the least money (Table 3). Similarly as in case of own income per capita, these results were affected by the number of inhabitants in a given local government unit.

Expense policy includes policy concerning current expenditure, incurred for the ongoing functioning of these units and property expenses allocated to investments. According to Jastrzębska, investment expenditure indicates higher income flexibility that current expenses, since investment expenditure grows with an increase in budget revenue [Jastrzębska 2004]. The highest proportion of property expenses was found for the Poznań and Kościan counties (almost 20%), which indicates a high development potential of these local government units. An almost four times lower (minimum) percentage of expenses was recorded in the Nowy Tomyśl and Ostrzeszów counties (Table 3). Investments may be financed from their own resources or outside sources thanks to subsidies. According to Ruśkowski, a certain relationship may be found between the level of own income and investment expenditure [Ruśkowski 2004]. However, studies did not show a strong dependence in this respect<sup>5</sup>. Another possible source to cover investment expenditure is revenue from taken credits and loans. In 1/2 analysed counties total indebtedness exceeded 12.49% in relation to total income (Table 2). The Oborniki and Pleszew counties turned out to be in biggest debt (33%), although indebtedness did not exceed the statutory level of 60%<sup>6</sup> (Table 3). These units were also relatively heavily burdened by repayment of liabilities, although the highest index, recorded in the Czarnków-Trzcianka county, also did not exceed the statutory limit of 15% total income. Meeting the requirements concerning the level of indebtedness and the amount of repayments in a given budgetary year is not a reliable guarantee of good financial standing of local government units and thus credit rating, making it possible to take out new liabilities [Gonet 2006]. A tool facilitating an evaluation of potential capacity to

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<sup>4</sup> Pearson's linear correlation coefficient was 0.63; significance at 0.05.

<sup>5</sup> Pearson's linear correlation coefficient for the proportion of property expenditure and own income index was 0.38; significance at 0.05.

<sup>6</sup> The Act of 30 June 2005 on public finances [Ustawa... 2005].

pay debts and finance new investments is the proportion of operating surplus in current income [Jastrzębska 2004]. The highest level of this index was recorded for the Poznań and Szamotuły counties (almost 14%), while the lowest for the Środa county (−1.62%). This negative value may indicate that a portion of current expenses was covered by property income or reimbursement financing sources.

## CLASSIFICATION

Normalized data were classified using Ward's method. The analysis of nodes on the dendrogram showed that there were three clusters. However, due to the low homogeneity of clusters hindering factual interpretation, it was decided to adopt division at a lower level of the clustering process. Classification was searched for at the lowest possible level, at the same time at a relatively big distance between successive stages of node formation. As a result the adopted division classified the analysed population into seven clusters (Fig. 1).

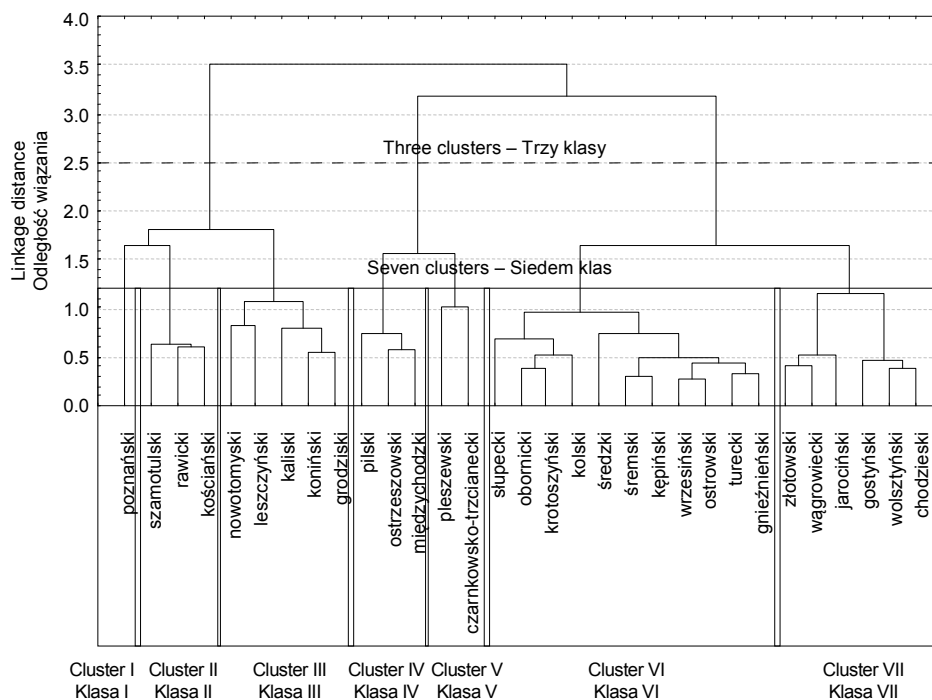


Fig. 1. Classification of counties of the Wielkopolskie province using Ward's method in terms of selected indicators of financial standing (Euclidean distance)

Source: the authors' study based on data of the Ministry of Finances and the Central Statistical Office.

Rys. 1. Klasyfikacja powiatów województwa wielkopolskiego metodą Warda według wybranych wskaźników sytuacji finansowej (odległość euklidesowa)

Źródło: opracowanie własne na podstawie danych Ministerstwa Finansów oraz GUS.



The first cluster consisted of only one local government unit, i.e. the Poznań county (Fig. 1). This local government unit was characterized by a high amount of own resources per capita (by PLN 53 and PLN 58 higher than the mean for the province and the national mean, respectively) and the highest financial independence. It was shown by the highest proportion of own income (almost two times higher than in local government units of the same level in Poland) and at the same time the lowest percentage of subsidies in total budget revenue, amounting to 50% national mean (Table 4). This independence made it possible to modify expenditure relatively more freely than it was the case with the other local government units of the same level both in the analysed province and nationwide. This was related with the highest percentage (by 20 and 14 percentage points higher than in the Wielkopolska region and in Poland, respectively) of receipts from individual and corporate income taxes, which shows high economic activity in this area. Good income situation made it possible to incur considerable investment expenditure. The proportion of property expenses in total expenditure was almost 20%, which amounted to a two times higher amount of the mean both for units of the same administrative level in the Wielkopolskie province and the nationwide average. The affluence of this county (high own income per capita), combined with high expense independence, constituted high investment potential, which in the future may still widen the gap between the Poznań county and the other regions of the Wielkopolskie province.

Despite the highest participation in financing investments the local government of Poznań reported average indebtedness and the degree of burden connected with principal repayment together with interest lower than the mean (Table 4). This resulted from the highest amount, among all analysed local government units, of operating surplus in current income (14.97%), which was almost two times higher than the average level in the analyzed province and three times higher than the mean for counties in Poland. This indicates a relatively high participation of own financing sources to cover investment expenditure.

The second cluster was formed by three counties: the Kościan, Rawicz and Szamotuły counties (Fig. 1). These units reported results slightly over average in terms of financial independence and the proportion of income taxes in own income in relation to the Wielkopolskie province (Table 4). In comparison to local governments of the same level in Poland, the percentage of grants and income taxes was below the average. Despite the low level of expenses per capita, these local governments invested relatively high amounts of money. The proportion of property expenses in total budgetary expenditure was highest among all clusters (13.49%), except for the Poznań county (cluster I), which dominated in this respect. In the discussed units investments were almost entirely financed from non-repayable financing sources, as it is shown by the lowest indebtedness among all clusters (close to zero) and the degree of burden with principal and interest repayment. This is also confirmed by the relatively high, two times higher than the national average, proportion of operating surplus in current income.

The third cluster comprised areas in the immediate vicinity of county seats: Kalisz, Konin and Leszno, and those neighbouring with the Poznań county, i.e. the Grodzisk and Nowy Tomyśl counties (Fig. 1). Similarly as in the Poznań county, high financial independence was found in those units (in comparison to the province and the country scale), which resulted in operating surplus level in current income considerably exceeding the mean and higher than average indexes of property expenses (Table 4). The characteristic features for this cluster were the worst indexes per capita both in terms of own

income (by PLN 18 and PLN 15 lower than the mean for the analysed province and the nationwide average, respectively) and total expenditure (by PLN 160 lower than the average for the province and by PLN 70 lower than the nationwide average). This is connected with the rather high number of inhabitants living in the areas classified to the discussed cluster and by no means indicates poor financial situation of these units. The level of indebtedness and its repayment, similarly as in case of the Poznań county, was similar to the average for the province.

Table 4. Intracluster values of characteristics – selected indicators of financial standing of counties in the Wielkopolskie province (median values)

Tabela 4. Wewnątrzklasowe wartości cech – wybranych wskaźników sytuacji finansowej powiatów w województwie wielkopolskim (wartości mediany)

Characteristic Cecha	Cluster – Klasa							Total Ogółem	Nation- wide county average Przecięt- nie powiaty w Polsce
	I	II	III	IV	V	VI	VII		
Own resources (PLN) Środki własne (zł)	205.21	157.90	134.22	213.50	169.21	150.93	154.00	152.52	147.00
WSWI (%)	53.61	30.28	32.65	28.82	22.19	26.90	25.10	28.07	27.16
Subsidies (%) Dotacje (%)	8.86	17.82	9.90	23.19	25.32	14.79	15.39	15.37	18.44
Taxes (%) Podatki (%)	64.29	48.50	50.82	36.09	34.79	48.21	42.94	45.57	50.73
Expenses (PLN) Wydatki (zł)	525.40	481.10	479.69	724.01	805.80	638.02	707.56	639.25	548.00
Property expenses (%) Wydatki majątkowe (%)	20.19	13.49	12.10	6.21	10.49	8.53	12.86	10.26	11.67
Liabilities (%) Zobowiązania (%)	12.01	0.18	11.71	1.23	23.00	13.82	12.97	12.49	13.19
Repayment (%) Spłata (%)	1.72	0.16	1.64	0.80	8.72	3.51	2.25	2.49	3.40
Surplus (%) Nadwyżka (%)	14.97	10.50	9.64	5.73	3.17	4.03	8.11	6.84	5.22

Source: the authors' study based on data of the Ministry of Finances and the Central Statistical Office and Budżety... [2007].

Źródło: obliczenia własne na podstawie danych Ministerstwa Finansów i GUS oraz Budżetów... [2007].

The Międzychód, Ostrzeszów and Piła counties comprised cluster IV (Fig. 1). A specific characteristic of these areas was the highest amount of own income per capita (PLN 213.50), which was by over PLN 60 higher than the average in local government units of the same level in the province and by PLN 66 higher than the national average.

At the same time a high level of total expenditure per capita was recorded here. Relatively high values of income and expense indexes per capita are connected with relatively low population density in two counties in this cluster: Międzychód and Ostrzeszów<sup>7</sup>. However, this situation did not guarantee an appropriate structure of income and expenses, on the one hand providing expense independence and on the other creating investment potential. The proportion of resources allocated to investments in the above mentioned local government units was minimum (6.21%), over three times lower than in the Poznań county (cluster I) and by almost 1/2 lower than in all counties nationwide. This indicates that a vast majority of total expenditure per capita was allocated to current needs of the units. This also confirms lower than the provincial average index of operating surplus. The low degree of realized property expenses was also connected with low indebtedness and low burden with repayment of liabilities. Also the relatively low financial independence did not make possible high investment expenditure. Although the proportion of own income in total income was comparable to the average for counties of the Wielkopolskie province, the percentage of budgetary subsidies was close to the maximum level, which was recorded in cluster V.

Cluster V comprised the Pleszew and Czarnków-Trzcianka counties (Fig. 1). These local governments turned out to be least financially independent due to the factors already mentioned above. One of these was the lowest percentage of own income (by 30 percentage points lower than in the Poznań county and by 5 percentage points lower than the national mean). The other was the simultaneous highest proportion of subsidies in budgetary income (25.32%), which exceeded by almost three times the level recorded in clusters I and III, and it was by almost 7 percentage points higher than the national average (Table 4). The low level of primary expense independence was connected with the minimal proportion of tax income in total income (34.79%). In this respect the difference in relation to both the provincial mean as well as the national average was still higher, amounting to 10 and 15 percentage points. This results from the relatively low number of economic entities in these areas<sup>8</sup>. This also stemmed from functions served by these local governments. The Pleszew county has a considerable potential for the development of agriculture, while the Czarnków-Trzcianka county due to its high forest cover to a considerable degree plays a role in tourism [Majchrzak and Wysocki 2007]. In these counties total expenses were observed to be highest among all classes of total expenses per capita (PLN 805.80), which – as it has already been mentioned – was related with low population density, especially in the Czarnków-Trzcianka county<sup>9</sup>. This situation in combination with the lowest amount of operating surplus in current income (3.17%), amounting to 1/2 mean for all counties in the province with the average percentage of property expenses implied the highest degree of indebtedness (23.00%) and burden connected with principal and interest repayment (8.72%). The proportion of liabilities in total income was almost two times higher than the average in the Wielkopolskie province, and by 10 percentage points exceeded the national average. It is also

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<sup>7</sup> In the years 2004-2006 (median values) it was 49.29 inhabitants per 1 km<sup>2</sup> in the Międzychód county and 70.56 inhabitants in the Ostrzeszów county, with the average for all Wielkopolskie counties of 87.07.

<sup>8</sup> In 2006 it was approx. 11.24 per 100 productive age individuals, with the Wielkopolskie province average of 14.78.

<sup>9</sup> In the analyzed years it was on average 47.66 inhabitants per 1 km<sup>2</sup>.

distant from the statutory limit of 60%. The value of repayment index may be more disturbing, which over three times exceeded the average level in the province and two times the national level. This meant a relatively high burden of principal and interest.

Cluster VI, the most numerous, comprised 11 counties (Fig. 1). These local governments reported the values of partial indexes of financial situation slightly lower than the average, except for the proportion of individual and corporate income taxes as well as the level of indebtedness and repayment, which were by approx. 1-2 percentage points higher than the mean for all analysed units in the province (Table 4). Nationwide the situation was similar, with only this difference that own income per capita slightly exceeded the national average, the proportion of taxes was a little below the average, while the percentage of subsidies was much lower (by approx. 4 percentage points) than the average. Expenditure per capita also differed to a large extent from the average (by PLN 90 higher).

In turn, cluster VII was formed by six counties: Chodzież, Gostyń, Jarocin, Wągrowiec, Wolsztyn and Złotów (Fig. 1). These local governments recorded own income per capita, percentage of property expenses as well as indebtedness and liabilities repayment levels close to the provincial and national averages (Table 4). Total expenses per capita (by PLN 68 and by PLN 159, respectively, in the province and in the country) and the proportion of operating surplus were markedly above the average. In terms of financial independence the percentage of own resources was by 2-3 percentage points lower than the average level in the analysed region and in the country, whereas the volume of grants in total budgetary income was by several percentage points lower than the national average.

## CONCLUSION

Generalizing the above considerations it may be stated that the financial situation in the counties of the Wielkopolskie province in the years 2004-2006 varied. The best financial standing was found for the Poznań county. It recorded the highest values of individual indexes of financial standing, except for indebtedness and burden connected with repayment of liabilities, which were similar to the average in the province, and lower than average expenditure per capita. A good state of finances of local governments was also observed in the Grodzisk, Kalisz, Konin, Leszno and Nowy Tomyśl counties. This resulted first of all from high financial independence expressed in the considerable proportion of own income and the low proportion of grants in budgetary income, as well as the high percentage of tax revenue in own resources. These local governments were characterized by a high proportion of property expenses in total expenses, which was possible thanks to the above average amount of operating surplus in current income. The above mentioned counties also had a better financial standing than units of the same level throughout Poland.

The Czarnków-Trzcianka and the Pleszew counties had relatively the worst financial standing. This was caused by the relatively smallest financial independence, the lowest proportion of receipts from income taxes in own income, as well as high indebtedness and burden with repayments, exceeding two or three times the provincial and national averages.

Results of analyses are partly consistent with those reported in previous studies. They led to a conclusion that the best financial standing in 2006 was found e.g. for local governments of the Kalisz, Konin, Leszno, Poznań as well as Jarocin and Szamotuły counties. This is to a certain degree consistent with the results recorded in this study. It is similar in case of the worst financial situation, reported for Czarnków-Trzcianka, Pleszew, as well as Międzychód, Ostrzeszów and Rawicz counties [Majchrzak 2008]<sup>10</sup>.

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<sup>10</sup> However, only one year was analyzed and a partly different set of variables was used in earlier studies.

**SYTUACJA FINANSOWA POWIATÓW WOJEWÓDZTWA  
WIELKOPOLSKIEGO W LATACH 2004-2006**

**Streszczenie.** W artykule dokonano oceny sytuacji finansowej powiatów województwa wielkopolskiego. W analizie wykorzystano dane Ministerstwa Finansów oraz Głównego Urzędu Statystycznego z lat 2004-2006. Na podstawie przesłanek merytorycznych i statystycznych dokonano wyboru wskaźników sytuacji finansowej jednostek samorządowych. Stosując metodę Warda sklasyfikowano badane jednostki w siedem klas o podobnej sytuacji finansowej. Najlepsza sytuacja finansowa charakteryzowała powiat poznański oraz powiaty: grodziski, kaliski, koniński, leszczyński i nowotomyski, najgorsza zaś samorządy: czarnkowsko-trzcianecki i pleszewski.

**Słowa kluczowe:** sytuacja finansowa, powiaty, metoda Warda

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