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## Article

# Spatial and institutional analysis of the voivodships expenditure on culture in the years 2003 - 2015

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## SPATIAL AND INSTITUTIONAL ANALYSIS OF THE VOIVODSHIPS EXPENDITURE ON CULTURE IN THE YEARS 2003 – 2015

ADAM MATEUSZ SUCHECKI<sup>1</sup>

### Abstract

Following the completion of the process of decentralisation of public administration in Poland in 2003, a number of tasks implemented previously by the state authorities were transferred to the local level. One of the most significant changes to the financing and management methods of the local authorities was the transfer of tasks related to culture and national heritage to the set of tasks implemented by local governments. As a result of the decentralisation process, the local government units in Poland were given significant autonomy in determining the purposes of their budgetary expenditures on culture. At the same time, they were obliged to cover these expenses from their own revenues.

This paper focuses on the analysis of expenditures on culture covered by the voivodship budgets, taking into consideration the structure of cultural institutions by their types, between 2003-2015. The location quotient (LQ) was applied to two selected years (2006 and 2015) to illustrate the diversity of expenditures on culture in individual voivodships.

**JEL classification:** H7, Z1

**Keywords:** expenses on culture, voivodships budgets, local finances, cultural institutions, location quotient

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## INTRODUCTION

In most countries, the provision of cultural services is divided between the public and the private sector. The public sphere is also divided between different administrative levels – the central, voivodship and county levels, and local communes (Håkonsen & Løyland, 2013, p. 2). Studies of various aspects of local cultural policy and local cultural spending can be grouped in two recent examples. Most of the studies analyse local cultural expenditures as a whole, i.e. as an aggregate of all cultural expenditures in the municipality (Depalo & Fideli, 2011, pp. 1-23; Benito, Bastida & Vicente, 2013, pp. 3-37; Werck, Heyndels & Geyes, 2008, pp. 35-38; Stastna, 2009, pp. 7-25). In addition, some studies analyse a specific local or regional cultural institution, such as an opera house (Schultze & Ursprung, 2000, pp. 129-147) or a theatre (Getzner, 2004, pp. 27-42). In this study, the author will combine the two examples mentioned above and begin by analysing the aggregated expenditures of voivodship budgets in Poland on culture and national heritage for the economic background, then conduct analyses of five groups of particular cultural institutions.

The main purpose of the changes in the field of culture after the systemic transformation was the introduction of mechanisms supporting the efficient and fair management of public resources, the introduction of changes in the competences of public administration relating to the organisation of the financing process for culture, and the introduction of new solutions in the financing, organisation and management of cultural institutions such as the decentralisation of cultural institution management, increasing autonomy of cultural institutions, and the development of legal frameworks for patronage and sponsorship in this area (Wrona, 2011, p. 5), as well as to improve and modernize public management in self-government units by implementing the New Public Management methodology (Łukomska-Szarek & Włóka, 2013).

Among the systemic changes to the Polish economy after 1989, the decentralisation process was the most significant in terms of the functioning of the cultural sector. This process can be divided into four stages.

The first stage was implemented between 1989-1991. It was the initial stage of the transformation, during which the book and music markets were privatized and the process of decentralising public tasks related to the

dissemination of culture was initiated. During this period, most of the existing cultural institutions were taken over by the communes, which resulted in the implementation of the assumptions of a new, democratic state, but was also dictated by its poor economic condition (Przybylska, 2007, pp. 52-55).

The second stage, implemented between 1991-1993, was an attempt to carry out the systemic reform of cultural institutions. The clear decentralisation in the management of cultural institutions was reflected in the creation of new divisions, corresponding to the three organisational levels of the country. The first level refers to cultural institutions of great significance to national culture, which is under the direct supervision of the Ministry of Culture and Art and are financed by it. The second level refers to institutions under the care of the state. These institutions are supervised and financed by the voivodship governors, with the clear support of the central governmental institutions. The third level refers to institutions subordinated to local government units, which are supported by the voivodship authorities. The law on the organisation and conducting of cultural activities was adopted in 1991 (Journal of Laws, 1991), and remains in force today in amended form.

The third stage of decentralisation in the field of culture occurred between 1993-1997. During this period, the decentralisation process in culture did not progress significantly. This period can be seen almost like a renaissance for the centralised model for the control and management of cultural institutions. However, there were many gestures from the central government that emphasized the caring role of the state towards the cultural sphere.

The fourth stage of decentralisation commenced in 1997 and lasted till 2001. In this period, the decentralisation reform was completed. Self-government at the voivodship, county and commune level appeared. The voivodship governments became the organisers of the majority of the state cultural institutions (Ministry of Culture and National Heritage, 2009).

The process of the decentralisation of public administration resulted in changes in the role of individual public bodies in the organisation and financing of cultural activities. Nevertheless, despite the changes described above, the role of the state bodies in this area is still significant. This results from the role assigned to the state bodies, which serve as regulatory institutions in

the scope of the organisation and financing of cultural activities and as direct organizers of cultural institutions. The crucial problem of this paper is to identify the spatial concentration of the cultural potential of voivodships in Poland represented by the spatial distribution of the expenditures from the local budgets on the selected cultural institutions. To illustrate the diversity of expenditures on culture in individual voivodships the location quotient for two selected years (2006 and 2015 was applied). This method allows us to determine the regional fields of specialization which show more intensive economic progress of one region over others.

### **EXPENDITURE ON CULTURE INCURRED BY THE VOIVODSHIPS IN THE YEARS 2003 – 2015**

The analysis of cultural expenditures incurred by local government units covers the period from 2003 to 2013. The expenditures by the voivodships in four selected years – 2003, 2006, 2010 and 2015 – were compared.

The total budget expenditures on culture and national heritage protection by local governments grew steadily during the analysed period. A slight decrease was noted in 2015. In 2003, these expenditures amounted to PLN 2,629 million (0,40% of GDP), in 2006 to PLN 4,239 million (0,49% of GDP), in 2010 to PLN 7,006 million (0,59% of GDP), and in 2015 to PLN 6,923 million (0,48% of GDP). Per-capita expenditures also grew from PLN 68.84 in the first analysed year to PLN 180 in the last year.

The regional budget expenditures on culture share in the total expenditures in years 2003-2015 in Poland stands at an equal level of an average 80% (79,4% in 2003, 83,4% in 2010 and 78,5% in 2015). The Mazowieckie voivodship incurred the highest expenditures on culture and national heritage protection between 2003-2015. In the analysed years, they amounted to PLN 374.825 million in 2003, PLN 780.899 million in 2006, PLN 1,205.208 million in 2010 and decreased to PLN 1,070.444 million in 2015. The least money on culture was spent by the Świętokrzyskie voivodship, despite the fact that the expenditures of local government units grew during the analysed period. The statistical data above shows that in 2003 the expenses amounted to PLN 60,744 million in 2003, increased to PLN 92.269 million in 2006, reached the amount of PLN 209.347 million in 2010, and decreased to PLN 160 million in 2015.

Taking into account the per-capita expenditures

on culture, the difference in expenditures incurred by the Mazowieckie and Świętokrzyskie voivodships changed during the analysed period. In 2003, per-capita expenditures amounted to PLN 25.95, in 2006 it increased to PLN 79.22, in 2010 it decreased to PLN 65.27, reached a very low level of PLN 5.84 in 2013, and increased to PLN 73.28 in 2015. The Śląskie voivodship came second in terms of the total expenditure on culture in the analysed period, while the Dolnośląskie voivodship ranked second in terms of per-capita expenditures.

### **EXPENSES ON CULTURE INCURRED BY THE VOIVODSHIPS IN YEARS 2006 AND 2015 – SPATIAL TERMS ANALYSIS**

A general overview of expenditures incurred by particular voivodship governments on cultural institutions shows that these expenses are characterised by spatial diversity. Taking this into account, it seems advisable to perform a comparative analysis of the average of these expenses in Poland. The tools for spatial analysis used for this are location quotients (LQ) calculated for the expenditures of voivodship governments on particular cultural institutions.

In general, location quotients (also known as concentration indices) are a commonly applied and practical planning tool used to understand local economic specialisation and economic dependencies applied in analysing the spatial distribution of dependence relations between two variables (Shaffer, Deller & Marcouiller, 2004), in this case between the total expenditure on culture and the expenditure on the types of cultural institutions. The location quotient is also used as a management tool (Marcouiller, Prey & Scott, 2009, pp. 92-107). To calculate the location quotient value, concentration indices determined on the basis of the Lorenz concentration curve are used. The Lorenz curve is a useful tool because it illustrates a natural order of distributions from the most even to the most concentrated (Suchecki, 2010, pp. 135-139).

While interpreting the LQ values, one should take into consideration the values above and below unity. The value of  $LQ > 1$  indicates that in the analysed voivodship the expenditure on a particular type of cultural institution is higher than the average expenditure in Poland, while  $LQ < 1$  indicates that the voivodship government expenditure on a particular type of cultural institution is lower than the



**Table 1: Values of the location quotient (LQ) for voivodship expenditure on particular types of cultural institution in the year 2003**

Voivodship	Museums (LQ 1)	Libraries (LQ 2)	Community Centers and Clubs (LQ 3)	Theaters (LQ 4)
Dolnośląskie	1,03	0,80	0,88	1,04
Kujawsko-pomorskie	0,98	0,97	0,92	0,91
Lubelskie	1,16	<b>1,31</b>	1,26	0,55
Lubuskie	0,82	1,08	<b>1,69</b>	0,74
Łódzkie	1,14	0,82	0,79	0,95
Małopolskie	0,98	0,86	1,23	0,98
Mazowieckie	0,75	0,99	0,74	<b>1,81</b>
Opolskie	0,92	1,07	1,49	1,03
Podkarpackie	<b>1,41</b>	1,12	1,41	0,38
Podlaskie	0,91	0,94	1,15	1,22
Pomorskie	1,26	0,82	0,77	0,62
Śląskie	0,95	1,19	0,99	0,68
Świętokrzyskie	1,20	1,21	1,05	0,61
Warmińsko-mazurskie	1,10	1,20	1,19	0,78
Wielkopolskie	1,05	0,99	0,85	1,00
Zachodniopomorskie	0,78	1,12	1,32	1,05

Source: Data from relevant statistical yearbooks of the Central Statistical Office

average expenditure in the reference area.

Detailed results of this analysis for the year 2006 and 2015 are presented in Tables 1 and 2. Voivodships with expenditures on cultural institutions above the average

expenditure in Poland were marked in bold (the best), while voivodships below the average national expenditure were marked in italics (the worst).

The information presented in the table shows that in

**Table 2: Values of the location quotient (LQ) for voivodship expenditure on particular types of cultural institution in the year 2015**

Voivodship	Museums (LQ 1)	Libraries (LQ 2)	Community Centers and Clubs (LQ 3)	Theaters (LQ 4)
Dolnośląskie	0,89	0,61	0,83	0,73
Kujawsko-pomorskie	0,97	1,05	1,03	1,04
Lubelskie	0,60	1,29	1,20	0,54
Lubuskie	0,92	1,18	<b>1,76</b>	0,48
Łódzkie	0,81	0,92	0,83	<b>1,50</b>
Małopolskie	1,05	0,93	0,97	1,23
Mazowieckie	1,10	1,01	0,80	1,37
Opolskie	0,80	1,18	1,60	0,82
Podkarpackie	1,22	1,21	1,52	0,28
Podlaskie	1,00	1,30	1,25	0,76
Pomorskie	1,02	0,72	0,69	1,31
Śląskie	<b>1,42</b>	1,13	0,86	0,76
Świętokrzyskie	0,79	<b>1,33</b>	1,40	0,47
Warmińsko-mazurskie	1,10	1,20	1,27	0,56
Wielkopolskie	0,80	1,12	1,07	1,10
Zachodniopomorskie	0,75	0,94	1,30	1,34

Source: Data from relevant statistical yearbooks of the Central Statistical Office

the analysed years, the location quotient assumed positive values. However, the values were quite diverse, which may indicate an uneven distribution of voivodship government expenditures on particular types of cultural institutions. In the year 2003, the local expenses on museums were most concentrated in Podkarpackie voivodship (41% higher than in the referential area). The lowest level of LQ (0,75) was in Mazowieckie Voivodship. For libraries in 2003 the highest level of concentration was noticed in Lubelskie voivodship (LQ=1,31) and the lowest in Dolnośląskie voivodship (LQ=0,80). The highest value of LQ for community centers and clubs were noted in Lubuskie (LQ=1,69) and the lowest in Mazowieckie (LQ=0,74). For the third type of institution – the theatres the highest value of LQ in 2003 were noted in Mazowieckie (LQ=1,81) and the lowest in Podkarpackie (LQ=0,38). In the last year of the research the highest value of LQ for the museums was noted in Śląskie (LQ=1,42) and the lowest in Lubelskie (LQ=0,60), for the libraries the LQ in Świętokrzyskie reached the highest level of 1,33 and the lowest level of 0,61 in Dolnośląskie. For community centers and clubs in 2015 the highest value of LQ was noted in Lubuskie (LQ=1,76) and the lowest value in Pomorskie (LQ=0,69). The highest value of LQ for theatres (LQ=1,50) was noted in Łódzkie and the lowest (LQ=0,28) in Podkarpackie.

To provide a more detailed description of the

diversification of the expenditures on cultural institutions in particular voivodships, location quotient growth rates were calculated. The relevant values are presented in Table 3.

In the case of expenditures on museums, the highest location quotient growth rates in the analysed years were recorded in the Śląskie and Mazowieckie voivodships. This means that expenses incurred by these voivodships for this purpose grew faster in the analysed period than the average corresponding expenses for Poland as a whole. The lowest growth rates were recorded in the Lubelskie, Świętokrzyskie and Łódzkie voivodships.

In the analysed period, the highest increase in expenditure on libraries compared to the average national expenditure was recorded in the Podlaskie, Łódzkie, and Wielkopolskie voivodships. A decrease in these expenses was recorded in the Dolnośląskie, Zachodniopomorskie and Pomorskie voivodships.

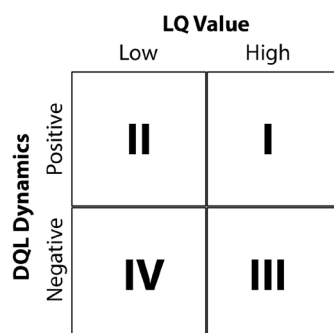
In the case of community centers, the location quotient growth rates had the highest positive values in the Świętokrzyskie, Wielkopolskie and Kujawsko-Pomorskie voivodships. The lowest values were recorded in the Małopolskie, Śląskie, Pomorskie voivodships. This means that in these voivodships, the increase in expenditures on community centers was lower than the average increase in the reference area.

**Table 3: Values of the location quotient growth rates for voivodship expenditure on particular types of cultural institution in the years 2003 and 2015**

Voivodship	Museums (LQ 1)	Libraries (LQ 2)	Community Centers and Clubs (LQ 3)	Theaters (LQ 4)
Dolnośląskie	-0,13	-0,24	-0,06	-0,29
Kujawsko-pomorskie	-0,01	0,08	0,12	0,15
Lubelskie	-0,48	-0,02	-0,04	-0,03
Lubuskie	0,12	0,09	0,04	-0,35
Łódzkie	-0,29	0,13	0,05	0,57
Małopolskie	0,07	0,08	-0,21	0,25
Mazowieckie	0,47	0,02	0,08	-0,24
Opolskie	-0,13	0,09	0,07	-0,20
Podkarpackie	-0,13	0,08	0,07	-0,27
Podlaskie	0,11	0,38	0,09	-0,37
Pomorskie	-0,19	-0,12	-0,11	1,10
Śląskie	0,49	-0,05	-0,13	0,11
Świętokrzyskie	-0,34	0,10	0,33	-0,24
Warmińsko-mazurskie	0,00	0,00	0,07	-0,28
Wielkopolskie	-0,23	0,13	0,25	0,10
Zachodniopomorskie	-0,04	-0,16	-0,02	0,28

Source: Data from relevant statistical yearbooks of the Central Statistical Office

**Figure 1: Diagram of classification of expenses incurred by voivodships on cultural institutions, taking into account the value and dynamics of the location quotient**



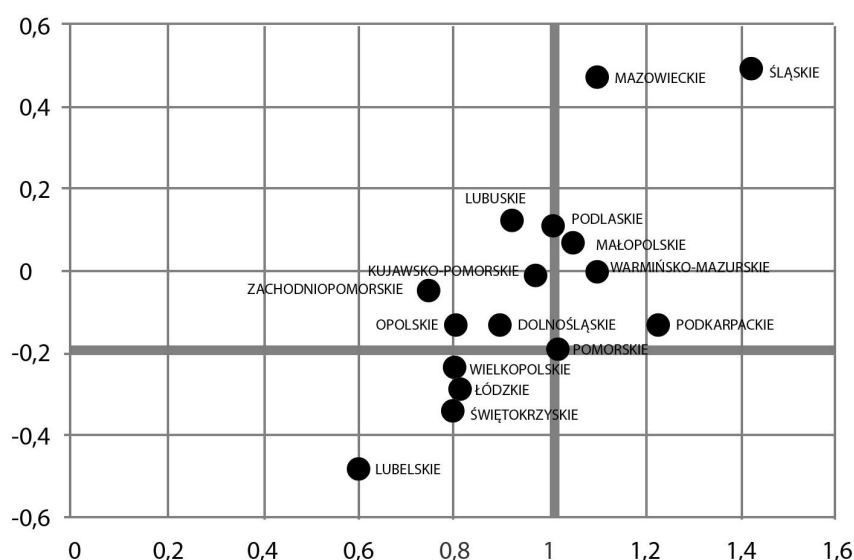
Source: Suchecki 2010

In the category of theatres, the dynamics of the LQ values for expenses incurred by voivodships was strongly polarised. The highest location quotient growths were recorded for expenses incurred by the Pomorskie, Łódzkie and Zachodniopomorskie voivodships, whereas the lowest were in the Podlaskie and Lubuskie voivodships. In the remaining voivodships, the increases and decreases in expenses incurred for this purpose were similar to those recorded in the reference area.

An analysis of the values and dynamics of the location quotient in a given period enables us to classify particular expenses incurred by voivodships on specified cultural institutions into one of the four groups presented in Figure 1.

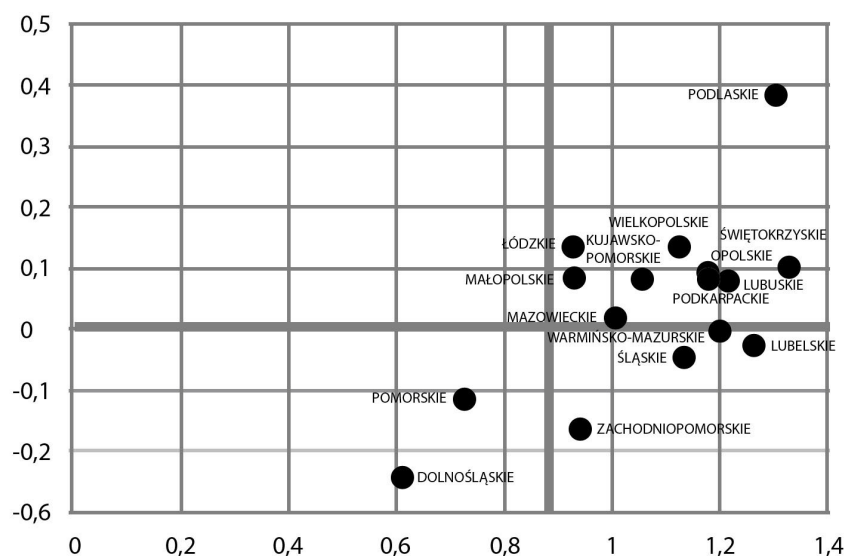
The first category refers to voivodships in which the expenses incurred for particular cultural institutions showed a high value for the location quotient ( $LQ > 1$ ) and positive dynamics of change ( $DQL > 0$ ). Voivodships in which the value of the location quotient for expenses incurred for culture was low ( $LQ < 1$ ), but the dynamics of change were positive ( $DQL > 0$ ) were assigned to the second category. In the case of voivodships classified into the third category, a high value for the location quotient of expenses ( $LQ > 1$ ) was recorded at the beginning of the analysed period, but the significance of these expenses declined ( $DQL < 0$ ). The fourth category includes voivodships characterised by low values for the location quotient for expenses incurred for particular cultural institutions ( $LQ < 1$ ) and negative dynamics of change for the location quotient ( $DQL < 0$ ).

**Figure 2: Value of the location quotient and its dynamics for expenses incurred by voivodships on museums in the years 2003 and 2015**



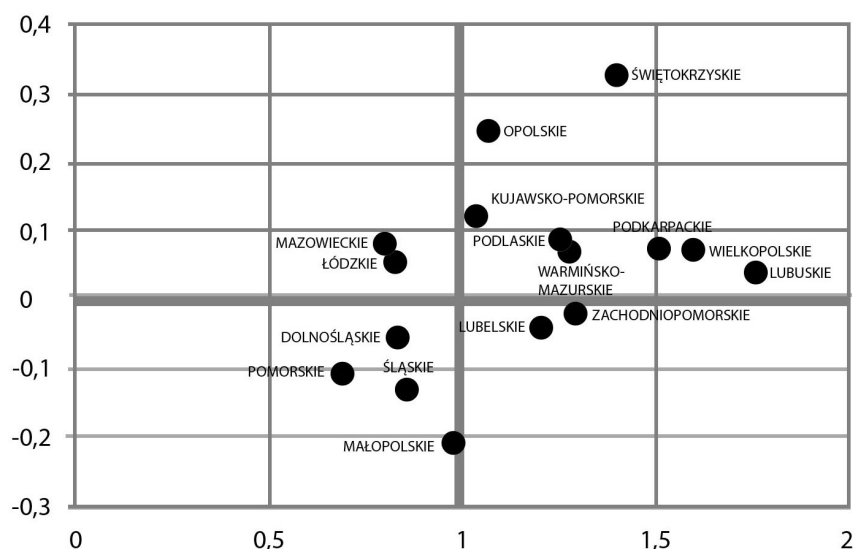
Source: Data from Table 3

**Figure 3: Value of the location quotient and its dynamics for expenses incurred by voivodships on libraries in the years 2003 and 2015**



Source: Data from Table 3

**Figure 4: Value of the location quotient and its dynamics for expenses incurred by voivodships on community centers and clubs in the years 2003 and 2015**



Source: Data from Table 3

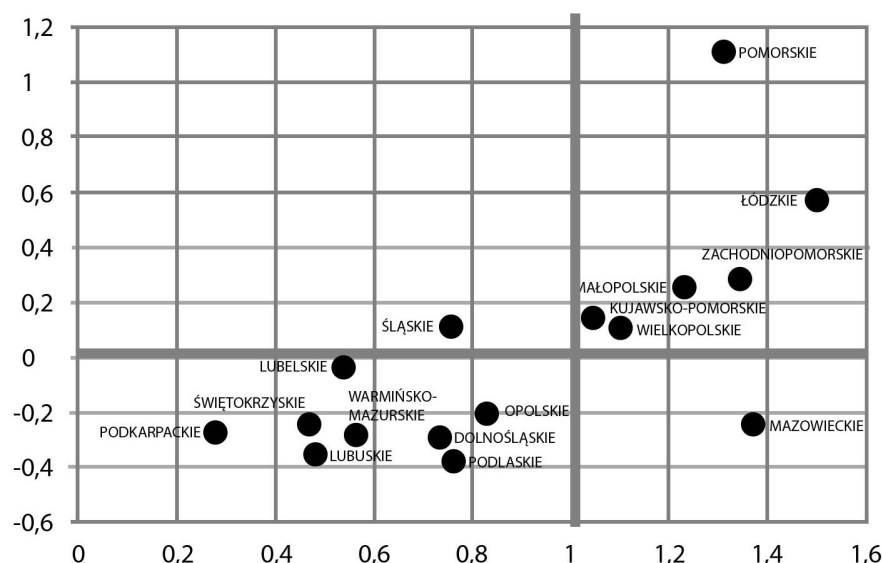
In accordance with the applied procedure, it can be assumed that in the case of museums during the analysed period, most of the voivodships were characterised by high values for the location quotient and positive dynamics of changes (Małopolskie, Mazowieckie, Śląskie, Podkarpackie, Pomorskie, and Warmińsko-Mazurskie) and by low values for the location quotient in the analysed years. However, the dynamics of change of these expenses were positive (Dolnośląskie, Kujawsko-Pomorskie, Lubuskie,

Opolskie, Podlaskie, Zachodniopomorskie). The fourth category includes Lubelskie, Łódzkie, Świętokrzyskie and Wielkopolskie voivodships, where expenses incurred for museums were characterised by low values for the location quotient and negative dynamics of change.

Expenses incurred for libraries characterised by high values for the location quotient and positive dynamics for its changes in 2003 and 2015 were recorded in the following



**Figure 5: Value of the location quotient and its dynamics for expenses incurred by voivodships on theatres in the years 2003 and 2015**



Source: Data from Table 3

voivodships: Podkarpackie, Lubelskie, Świętokrzyskie, and Opolskie. Expenses for libraries incurred by the Kujawsko-Pomorskie, Pomorskie, Małopolskie and Podlaskie voivodships, despite having low values for the location quotient, were characterised by positive dynamics of change. Low values for the location quotient and negative dynamics of change were recorded for expenses incurred by the Zachodniopomorskie, Dolnośląskie and Łódzkie voivodships. For the Lubelskie, Warmińsko-Mazurskie, Śląskie, Wielkopolskie and Świętokrzyskie voivodships, the expenses for libraries incurred in the analysed period were characterised by high values for the location quotient. However, the significance of these expenses declined over time.

While analysing the classification of the location quotients for expenses incurred by voivodships for community centers in 2003 and 2015, one can notice a clear increasing trend in the significance of these expenses. The majority of expenses incurred by the voivodships fell into the 1st category, excluding those of the following voivodships: Kujawsko-Pomorskie, Mazowieckie, Łódzkie (2nd category), Zachodniopomorskie and Lubelskie (3rd category), Dolnośląskie, Pomorskie, Śląskie and Małopolskie (4th category). The particularly large number of expenses placed in this category may indicate the tendency of local government units to increase expenditures on institutions responsible for cultural dissemination.

In the case of theatres, one can see a division of

voivodship expenses into two extreme groups. Due to the values of the location quotients and their dynamics of change, the expenses of the voivodships for this purpose fell mainly into the 1st and 4th categories. High values for the location quotient and positive dynamics of change in the analysed period were recorded for expenses incurred by the following voivodships: Pomorskie, Łódzkie, Zachodniopomorskie, Małopolskie, Wielkopolskie, and Kujawsko-Pomorskie. The worst values for the location quotient and its dynamics in 2003 and 2015 in relation to expenses incurred for theatres were recorded in the Lubelskie, Świętokrzyskie, Podkarpackie, Warmińsko-Mazurskie, Lubuskie, Opolskie, Dolnośląskie and Podlaskie voivodships.

## CONCLUSIONS

The results of this examination of the development of local government expenses have clearly highlighted the spatial diversity of these expenses. It can be proven by the values of the location quotients and their dynamics of change. The values of these measures also enable one to group the voivodships into four different categories according to the type of cultural institutions. The expenses on culture incurred by the particular voivodships in the analysed period increased, but their values were spatially diversified. The expenditures analysed according to cultural institutions were also different in particular voivodships,

showing the different aims of local cultural policies and the variation of cultural infrastructure development. At the same time, it is impossible to point out regional concentration of the expenditures for one particular institution in the selected timeframe. This may show the flexibility, variability and independence of local cultural policies. A clear upward trend in expenditure has been

observed only in the group of community cultural centers. The obtained results would allow for the conducting of more advanced analyses to explore the economic factors determining the situation described above. They also show the necessity of introducing changes to the cultural policy developed in Poland.

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