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THE ROLE OF THE VOIVODESHIP CAPITAL CITIES OF EASTERN POLAND IN THE ASPECT OF STIMULATING REGIONAL DEVELOPMENT

ROLA MIAST WOJEWÓDZKICH POLSKI WSCHODNIEJ W ASPEKCIE STYMULOWANIA ROZWOJU REGIONALNEGO

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Summary: According to the core-periphery model, large urban centers can make peripheries dependent on them, or consolidate their advantage over the peripheries through the mechanism of polarization. This article is an attempt to verify the theories of regional development covering the influence of central areas on the development of the neighboring areas, i.e. the core-periphery theories. The article presents a study of the dynamics of development of capital cities of Eastern Poland's regions in order to answer the question: is the development of capitals of depressed regions correlated with the dynamics of regional development processes? The research has shown that regional capitals do not play the role of voivodeship development stimulators. Therefore it can be argued that in the case of regions with a low level of socio-economic development, the phenomenon of resource leaching occurs to a greater extent than the stimulation of development by their capital cities.

Keywords: Eastern Poland, regional development, core-periphery theories.

Streszczenie: Zgodnie z modelem centrum–peryferie duże skupiska miejskie mogą uzależniać od siebie peryferie lub też utwierdzać swoją przewagę nad peryferiami poprzez mechanizm polaryzacji. Artykuł jest próbą weryfikacji teorii rozwoju regionalnego obejmujących wpływ ośrodków centralnych na rozwój obszarów sąsiednich, tj. teorii centrum–peryferii. W artykule opisano badanie dynamiki rozwoju stolic regionów Polski Wschodniej przeprowadzone w celu uzyskania odpowiedzi na pytanie: czy rozwój stolic regionów depresyjnych

jest skorelowany z dynamiką procesów rozwoju regionalnego? Badania wykazały, że stolice regionów nie odgrywają roli stymulatorów rozwoju województw. Można zatem postawić tezę, że w przypadku regionów o niskim poziomie rozwoju społeczno-gospodarczego w większym zakresie występuje zjawisko wymywania zasobów aniżeli stymulowania rozwoju przez ich stolice.

Słowa kluczowe: Polska Wschodnia, rozwój regionalny, teorie centrum–peryferie.

1. Introduction

The theories of regional development, covering the influence of their central areas on the development of neighboring areas, have been verified many times.

The theory of growth poles, both in macro and micro terms, has been known since the 1970s. As with many other theories it is subject to constant verification. The evolution of changes in management conditions imposed by the cyclical nature of the economy yields unpredictable results, which also makes it necessary to verify the views and theories on economic development in a regional perspective. The article is an attempt to verify the theses and theories concerning the role of major cities in the process of development in depressed regions. The subject of the study concerns the largest cities which are the capitals of Eastern Poland's regions, characterized by low indicators of the level of socio-economic development as well as low endogenous potential in relation to other regions.

2. Cities and regions in socio-economic development processes

The processes of urbanization and metropolization are becoming increasingly dynamic. In the next thirty years, the Habitat organization estimates that 80% of the world's population will live in cities and metropolitan areas. Major cities, metropolises and metropolitan areas are areas of accumulation of financial, human, social and intellectual capital and areas of concentration of capital-intensive infrastructure. These are places where the benefits of agglomeration and urbanization are obtained by economic units located within them and where the utility value of space for the population is optimized. Cities and metropolitan areas are places of residence and work of the creative classes, influencing the processes of broadly understood civilizational progress, reflected in the competitiveness of the territorial units. The processes taking place in cities and metropolitan areas have their specific character resulting both from their endogenous potential and from external competitive pressure on an international and national scale. The development dynamics of the largest cities cannot always be identified with the processes of regional development that are located within them. An additional complication for the phenomena and processes occurring in the development of cities and regions results from the advancement characteristics and socio-economic

dynamics of the regions. Cities perceived as drivers of development do not always act as growth poles for the regions in which they are located. Thus, urban dynamics does not always translate into regional dynamics. Regions with a high level of socio-economic development have an economic potential allowing for the absorption of development impulses created by the largest urban centers. Their capability of using innovations created in central places, i.e. cities, is much greater than in regions where the level of development of industry and services is not sufficient enough to purchase and implement high technologies and capital-intensive solutions. The occurrence of disproportions in regional development is a natural phenomenon in countries with a market economy. Reducing the disparities in the socio-economic development of regions is justified on the grounds of macroeconomic interest. For this reason, the identification of stimulators for the development of regions with a low level of development and limited endogenous potential is particularly important. In Poland, the regions with the lowest level of development include five voivodeships: Lubelskie, Podkarpackie, Podlaskie, Świętokrzyskie and Warmińsko-Mazurskie. They have similar characteristics in terms of the branch and industry structure of the economy and the structure of endogenous potential. However, the list of smart specializations shows that there are differences between the regions. According to the theory of growth poles, the capital cities of these voivodeships should play the role of vehicles of regional development and places of diffusion of innovations generating development impulses [Pięta 2014].

Referring to the research of J.R. Boudeville and representatives of the Franco-Belgian school of polarization (L.E. Davin, H. Beguin, J. Pelinck), it should be stated that the location of companies with an advanced market position and technology in leading economic centers cause the entire regions to benefit from them, provided that they manage to develop functional links with them [Boudeville 1978]. Then the phenomenon of diffusion of innovations and development processes may occur. Similar ideas can be found in A.O. Hirschman's theories. He claimed that the development of centers should be supported, followed by diffusion processes to less developed areas, e.g. through building infrastructure, including communication infrastructure [Hirschman 1958]. The core-periphery theories point to a long-term shift in production and employment from peripheral areas to central areas. This results in an increase in economic activity and efficiency in the central areas, while the pace of development of problem areas slows down.

The core-periphery theories showing the feedback between mutually driving processes of growth between the center (main urban centers) and external areas (peripheries) should be verified depending on the degree of development of individual regions [Grzeszczak 1999]. They should also be considered in relation to the theories of G. Myrdal and A.O. Hirschman concerning the leaching of resources, dissemination of potentials and multiplier effects in regional development [Jewtuchowicz 2011].

3. Characteristics of Eastern Poland's voivodeships against the background of the entire country according to selected indicators

In 2015, in the Eastern Poland's voivodeships, GDP per capita consisted of about 15% of the entire country's GDP. In 2003, in each of Eastern Poland's voivodeships the GDP per capita was lower than the national average by about 25%, and in 2015 it was lower by 30%. GDP per capita in Eastern Poland's voivodeships in the period under review was at a similar level (Table 1). The highest value of the coefficient of variation of GDP per capita in the entire period in question in the voivodeships was in 2008 when it was 5.5%, which means that the voivodeships do not differ in this respect. It should also be noted that Eastern Poland's voivodeships are less and less diversified in terms of GDP per capita.

The average number of business entities registered in the REGON register of enterprises in Poland in the entire period under review was higher than the average in Eastern Poland's voivodeships, and in 2017 this difference increased compared to 2003. In 2017, per 10 thousand citizens of Poland there were 1121 enterprises on average, while in Eastern Poland's voivodeships the number was much lower, i.e. Świętokrzyskie – 900, Warmińsko-Mazurskie – 874, Podlaskie – 854, Lubelskie – 834, Podkarpackie – 803.

In the period 2003-2017, economic activity of the residents of Eastern Poland's regions measured by the indicators of employment was below the national average. On average in 2017 there were 78 enterprises in the country per 1000 citizens of Poland, while the number for individual voivodeships was: Podlaskie – 65, Lubelskie – 62, Świętokrzyskie – 68, Podkarpackie – 59, Warmińsko-Mazurskie – 61. In 2003 the number for the entire country was 73, for Podlaskie – 66, Lubelskie – 56, Świętokrzyskie – 65, Podkarpackie – 54, Warmińsko-Mazurskie – 59. The calculated coefficient of variation for the assumed research period is decreasing, which means that the voivodeships do not show any differences in terms of this variable.

Between 2003 and 2008, among Eastern Poland's voivodeships, only in the Podlaskie voivodeship the share of the registered unemployed in the number of people of working age was lower than the national average, while in the remaining voivodeships it was higher than the national average. In the period 2003-2017 a decreasing trend was maintained both in the entire country and in the regions mentioned above. The highest share of the registered unemployed per working age population in the whole analyzed period was in the Warmińsko-Mazurskie voivodeship.

Demographic changes taking place in Poland and its voivodeships, i.e. ageing of the population, low natural population growth, increased mobility abroad of the population have a great impact not only on the labour market, but also affect local economies with various results. In the analyzed period only in the Podkarpackie

Table 1. Dynamics of the surveyed variables in Eastern Poland's voivodeships in 2017

Item	Poland	LUB	PDK	PDL	SWI	WRM	V_s (in %)
GDP per capita in current prices (in PLN)							
In 2003	22,148	16,009	16,545	16,682	17,709	16998	3.34
In 2015	46,792	32,074	33,176	33,272	33,841	33,176	1.73
Dynamics (%)	211.27	200.35	200.52	199.45	191.45	195.19	
Entities registered in REGON per 10,000 residents							
In 2003	938	707	680	804	803	773	6.75
In 2017	1121	834	803	854	900	874	3.88
Dynamics (%)	119.57	118.03	118.10	106.21	112.12	113.18	
Self-employment – natural persons running a business activity per 1000 residents							
In 2003	73	56	57	66	65	59	8.10
In 2017	78	62	59	65	68	61	5.05
Dynamics (%)	106.67	109.90	108.92	97.98	103.89	103.75	
Share of the registered unemployed in the number of people of working age							
In 2003 (%)	13.2	13.1	14.3	11.2	16.0	19.0	18.04
In 2017 (%)	4.6	6.3	6.8	5.4	6.1	6.7	7.95
Dynamics (%)	34.82	47.68	47.75	48.59	38.28	35.21	
Demographic old-age dependency ratio							
In 2003 (%)	18.6	20.7	18.5	21.0	21.3	16.1	10.19
In 2017 (%)	25.0	25.7	23.0	24.6	27.1	22.0	7.43
Dynamics (%)	134.56	123.94	124.59	117.33	127.11	137.08	
Natural growth rate							
In 2003 (%)	-0.04	-0.07	0.12	-0.08	-0.16	0.17	4076
In 2017 (%)	0.002	-0.12	0.12	-0.04	-0.27	0.01	218.2
Dynamics (%)	6.11	-168.57	98.65	-50.92	-167.22	4.44	
Balance of permanent migration abroad for permanent residence per 1 million residents**							
In 2003 (%)	-360	3	-136	-253	-53	-422	87.93
In 2017 (%)	-409	-259	-145	-283	-84	-542	58.60
Dynamics (%)	113.61	8633.33	106.62	111.86	158.49	128.43	

Where: POL – Poland, LUB – Lubelskie voivodeship, PDK – Podkarpackie voivodeship, PDL – Podlaskie voivodeship, SWI – Świętokrzyskie voivodeship, WRM – Warmińsko-Mazurskie voivodeship, V_s – coefficient of variation of a given variable in Eastern Poland's voivodeships.

Differences in the table result from rounding to two decimal places. * GDP dynamics for 2015; ** due to lack of data, the dynamics were calculated for 2014.

Source: own study based on Local Data Bank.

and Warmińsko-Mazurskie voivodeships the demographic dependency ratio was below the national average. The growing tendency was maintained in the remaining voivodeships.

In the period 2003-2007 a positive rate of natural growth could be observed in the Podkarpackie and Warmińsko-Mazurskie voivodeships, however, the exception were the years 2013 and 2015-2016. The rate of natural growth in the regions mentioned above (Podkarpackie and Warmińsko-Mazurskie) was positive and differed from the national trend. Eastern Poland's voivodeships are very different in terms of the rate of natural growth.

Due to the lack of data for the voivodeships, the balance of migration abroad for permanent residence was presented up to 2014. In 2003-2014, migration trends in Poland and in Eastern Poland's voivodeships were the same – the balance of migration was negative. In the entire research period the largest number of people per 1 million residents migrated abroad from the Warmińsko-Mazurskie voivodeship (866 people in total). The lowest number of persons was in the Lubelskie voivodeship (146 in total).

4. The scope and methodology of the research

The capitals of Eastern Poland's voivodeships, i.e. Kielce, Rzeszów, Lublin, Białystok, and Olsztyn, were purposefully selected for the research. This allowed to illustrate the dynamics of development of the capitals of Eastern Poland's voivodeships and to answer the question whether the capital cities of the voivodeships with a low level of economic development constitute a development impulse. The analysis was carried out on the basis of a quantitative approach, using data showing the stability of cities' economy, and the economic mismatch related to changes in the national economy and human potential. It should be noted that the availability of statistical data collected by the Central Statistical Office (GUS) for cities is very limited, therefore variables that would illustrate their dynamics in the best possible way were selected. The research period covered the years 2003 to 2017. All the variables are standardized by the zero unitarization process as it allows to standardize positive and negative characteristics, as well as zero-value characteristics. All the normalized features take the value in the range [0,1] [Borkowski, Kukuła (ed.) 2012]. This means that each of the three areas of development may have a maximum value of 1, which will mean a large development potential, while the value close to 0 – a lack of development potential. Diagnostic variables that are stimulants (S) were normalized according to K. Kukliński's proposal using the following formula [Borkowski, Kukuła (ed.) 2012]:

$$x_{ij} = \frac{x_{ij} - \min_i x_{ij}}{\max_i x_{ij} - \min_i x_{ij}} .$$

For variables that are destimulants (D), the following formula was used:

$$x_{ij} = \frac{\min_i x_{ij} - x_{ij}}{\max_i x_{ij} - \min_i x_{ij}} \cdot$$

The diagnostic variables presented in Table 2 were used to determine the synthetic index of the level of city development. The assigned weights reflect the share of the diagnostic variable from the lower level in the definition of the higher level factor. The weights within each level add up to 100%. The city development index was calculated using the following formula:

$$I_r = \frac{1}{n} \sum_{i=1}^n \alpha_i \cdot x_{ij},$$

where: I_r – index of the level of city development; j – designation of the years; i – number of the variable (feature) used to construct the index; n – total number of variables used to construct the index; x_{ij} – value of the “ i ” feature for the specified “ j ” year; α_i – the weight given to the “ i ” feature in the P index; $\sum \alpha_i = 1$.

Table 2. Set of variables describing city development factors

Areas/Endogenous factors of development	Weight	Name of diagnostic variable	Weight
Stability of the economy	33.33%	Entities registered in REGON per 10,000 residents	50.00%
		Self-employment – natural persons running a business activity per 1000 residents	50.00%
		Σ	100.00%
Economic mismatch	33.33%	Share of the registered unemployed in the number of people of working age	50.00%
		Demographic old-age dependency ratio	50.00%
		Σ	100.00%
Human capital / Human potential	33.33%	Natural growth rate	50.00%
		Balance of permanent internal and external migration per population of 1000	50.00%
		Σ	100.00%
Σ			100.00%

Source: own elaboration.

5. Research results

The results of the analysis indicate that the dynamics of individual variables adopted in the study for the cities is diversified. Taking 2003 as the base year, it should be noted that the highest dynamics of registered business entities in 2017 in REGON per capita was recorded in Rzeszów (increased by 22.75%) and Lublin (18.79%). This means that these cities are the fastest growing economies in terms of economic potential. A partial indicator confirming this phenomenon is the growing CIT income from legal persons per one resident in these cities, despite the fact that Rzeszów had 30,574 more residents at that time. On the other hand, in Białystok, Kielce and Olsztyn the weak dynamics of the number of economic entities can be observed since 2003 (Figure 1). For example in Kielce from 2003 to 2017, the number of economic entities per capita increased only by 8.6% (taking into account that in 2017 the number of residents decreased by 13,835 compared to 2003).

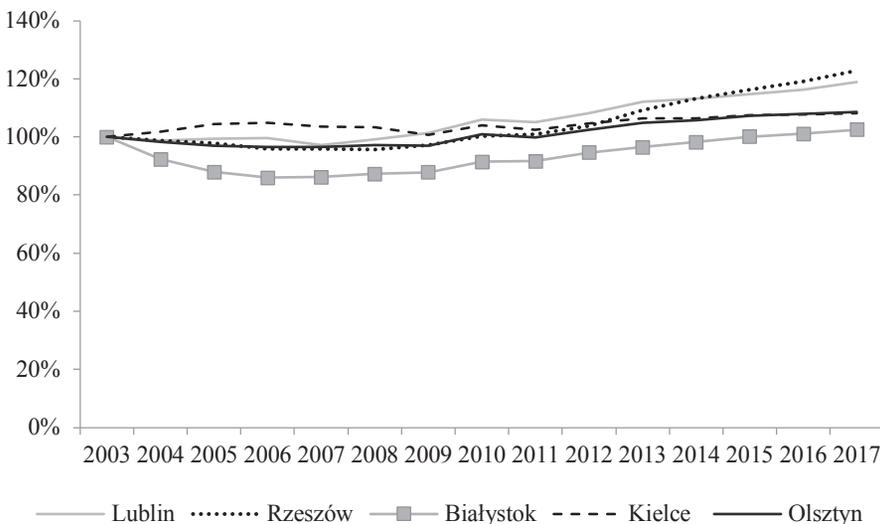


Fig. 1. Dynamics of entities registered in REGON in the period 2003-2017 (year 2003 = 100%)

Source: own elaboration.

The situation is similar with self-employment, which should be perceived in the context of the urban population's activity. The upward trend continued in only two cities: Lublin and Rzeszów, and in the others fewer and fewer people conducted a business activity (Figure 2). This may be due to the lack of favorable conditions resulting both from the internal environment of the region and from changes in the national economy. Taking into account these two variables, it should be concluded that only two of the analyzed cities are characterized by relative economic stability,

namely Rzeszów and Lublin. These cities are clearly able to react to long-term changes in the external environment.

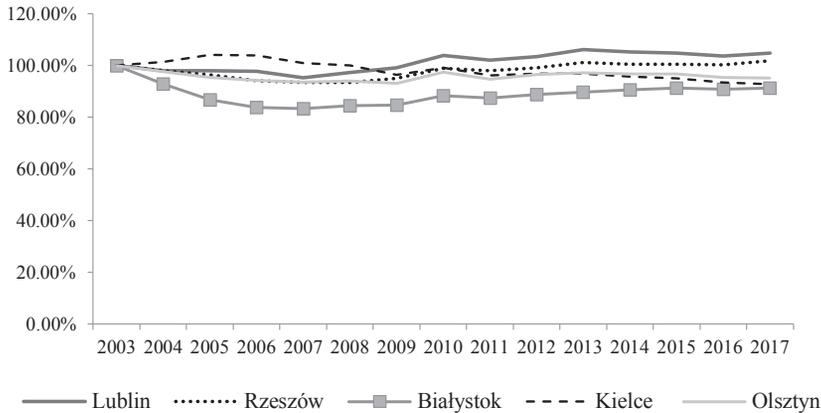


Fig. 2. Dynamics of natural persons conducting economic activity in the period 2003-2017 (year 2003 = 100%)

Source: own elaboration.

Mismatches in the economy can be illustrated by the share of the unemployed in the working-age population and the old-age dependency ratio. In all the studied cities the dynamics of the share of the unemployed in the working-age population was decreasing (Figure 3). This is due to Poland’s accession to the EU and the possibility of taking up employment abroad.

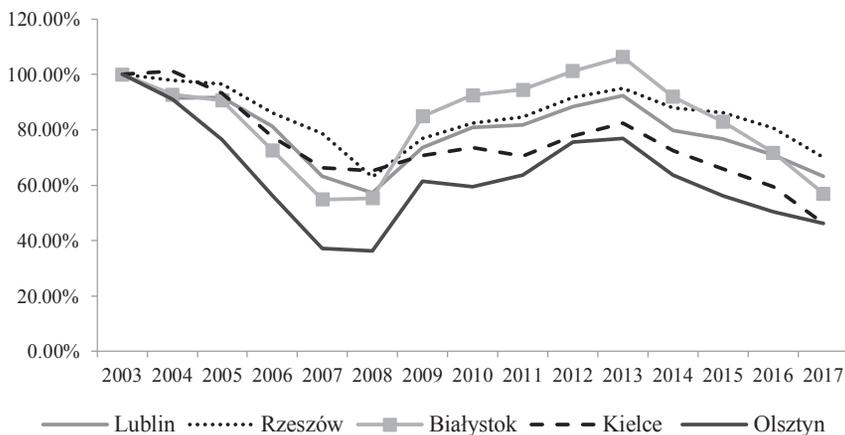


Fig. 3. Dynamics of the share of the unemployed in the working-age population in the period 2003-2017 (year 2003 = 100%)

Source: own elaboration.

On the other hand, the old-age dependency ratio in all the cities has been increasing, which is undoubtedly due to the phenomenon of population ageing in Europe (Figure 4). It should be noted that the greatest dynamics of this coefficient was recorded in the Świętokrzyskie voivodeship (increased by 81.81% compared to 2003). The smallest ratio of the number of people in non-working age to the number of people in working age in 2017 was in Rzeszów (23.7) and Białystok (24.3).

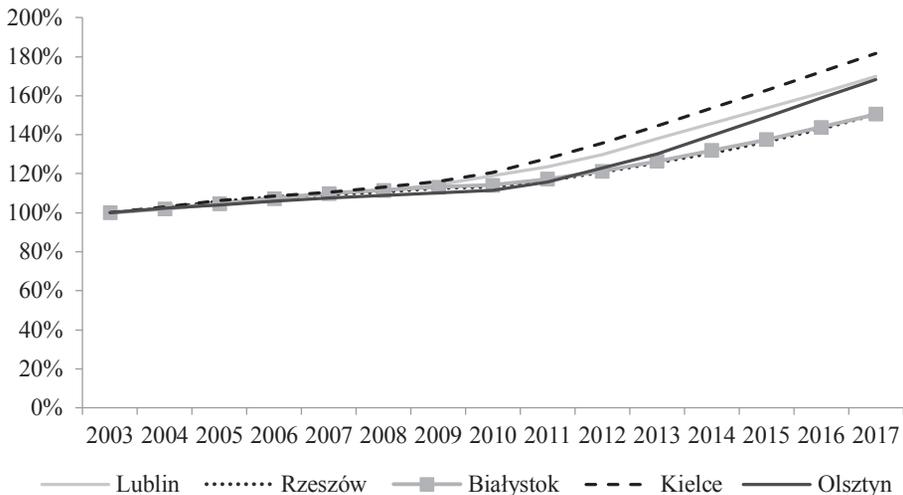


Fig. 4. Demographic dependency ratio dynamics in the period 2003-2014 (year 2003 = 100%)

Source: own elaboration

Another measure is the human potential, illustrated by the rate of natural growth and the balance of internal and external migration for permanent residence per capita. Negative dynamics of natural growth rate in 2017 was recorded only in Kielce, in other cities the dynamics of natural growth rate was positive (Figure 5). Even after the introduction of the 500+ programme, the natural growth rate in Kielce is negative and in 2017 amounted to -0.84% .

In 2017 the positive dynamics of migration balance (per capita) were observed only in two cities, Lublin and Rzeszów, while in the rest of the examined cities the dynamics were negative (Figure 6). Therefore it can be concluded that only Lublin and Rzeszów constitute an attractive place for residents to live and thus work or run their own business. Over the analyzed years, only in Rzeszów the migration balance showed an upward trend.

The next stage of the research was to develop an index of the level of city development, for which the data contained in the table were used.

On the basis of the above variables, an index of the level of city development was calculated. The highest dynamics of development level in the analyzed years was observed in Rzeszów (Table 3, Figure 7). In all the assumed variables, which are

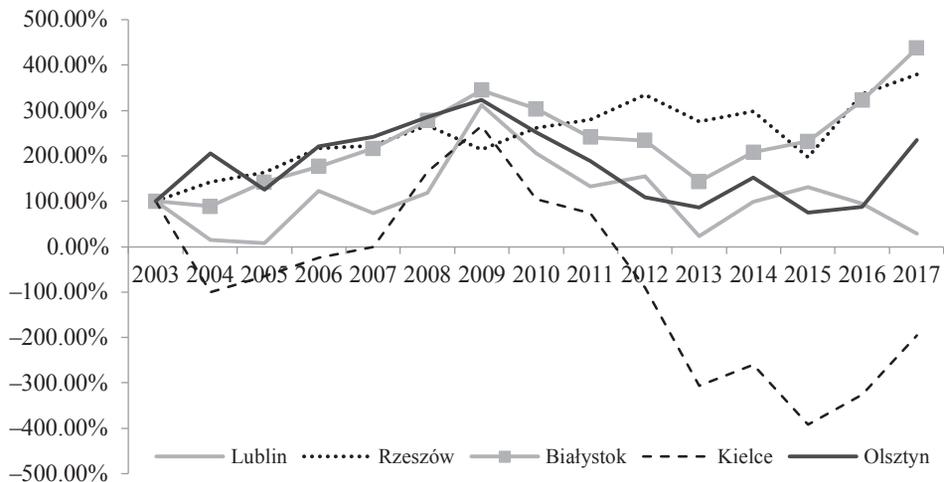


Fig. 5. Dynamics of the natural growth rate in the period 2003-2017 (year 2003 = 100%)

Source: own elaboration.

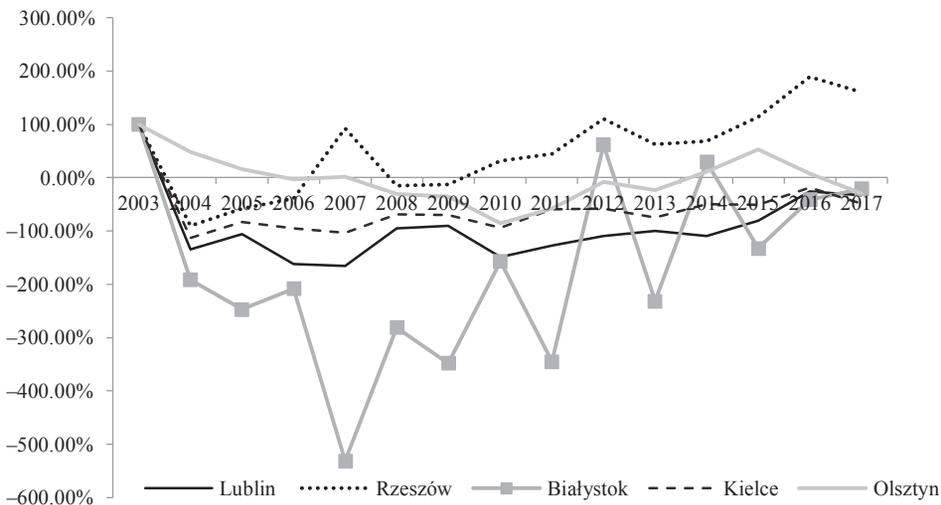


Fig. 6. Dynamics of internal and external permanent migration balance in the period 2003-2017 (year 2003 = 100%)

Source: own elaboration.

Table 3. Dynamics of diagnostic variables in 2017 (base year 2003 = 100%)

Name of diagnostic variable/City	Lublin	Rzeszów	Białystok	Kielce	Olsztyn
Stability of the economy					
Entities registered in REGON per 10,000 residents	118.79	122.75	102.51	108.06	108.47
Self-employment – number of natural persons running a business activity per 1000 residents	104.84	101.88	91.15	92.68	95.07
Economic mismatch					
Share of the registered unemployed in the number of people of working age	63.13	70.03	57.00	46.23	46.18
Demographic old-age dependency ratio	169.86	150.54	150.50	181.81	168.27
Human capital/Human potential					
Natural growth rate	28.85	379.37	437.37	-195.24	267.40
Balance of permanent internal and external migration per population of 1000	-32.56	160.13	-20.63	-49.20	-28.97

Source: own elaboration.

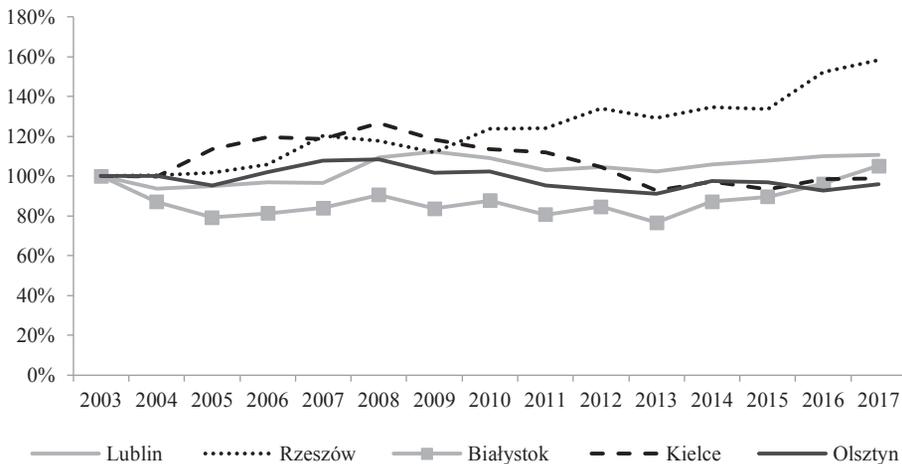


Fig. 7. Dynamics of the development level index of Eastern Poland’s voivodeship capital cities in the period 2003-2017 (year 2003 = 100%)

Source: own elaboration.

the stimulants of development, their value has increased. It is interesting to note that in the period 2003-2017, it was the only one of the examined cities to have a positive balance of migration. According to the calculated index, in 2003 the surveyed cities

were at a similar level of development. The highest level of development index was found in Olsztyn (0.57) and Białystok (0.51), while Kielce and Rzeszów were at a similar level of development. The lowest index was found for Lublin. In the whole analyzed period the most developed city was Rzeszów, the development level index of which in 2017 was 0.72, i.e. above the average calculated for the examined cities. On this basis it can be stated that Rzeszów is a city able to adapt to the occurring changes.

Table 4. Index of the level of development of Eastern Poland's voivodeship capital cities in 2003 and 2017

City	2003	2017	Dynamics
Lublin	0.402773	0.4460529	110.75%
Rzeszów	0.456376	0.7219174	158.18%
Białystok	0.514407	0.5404347	105.06%
Kielce	0.469591	0.4637169	98.75%
Olsztyn	0.57498	0.5519555	96.00%

Source: own elaboration.

The relationship between the index of the level of development of the examined cities and the value of GDP per capita in these cities was studied. At the assumed level of significance $\alpha = 0.05$ it should be stated that only in two cities – Lublin and Rzeszów there is a positive, statistically significant correlation. The correlation is high in Lublin ($r = 0.66$, with $p = 0.0139$) and very strong in Rzeszów ($r = 0.95$, with $p < 0.001$). This means that the level of development of Rzeszów and Lublin according to the presented development index translates into the level of GDP per capita in these cities.

In the National Spatial Development Concept 2030¹, the cities in Poland were divided into:

- centers of fundamental importance for the country's settlement system and economy,
- other voivodeship centers which, apart from regional functions, perform a number of functions of national importance, regional centers (which are not voivodeship capitals and which usually have between 100,000 and 300,000 residents),
- subregional centers, among which there are subgroups constituting former voivodeship capital cities and industrial centers
- and other local centers (including 'powiat' capitals).

¹ In accordance with Resolution No. 239 of the Council of Ministers of 13 December 2011 on the adoption of the National Spatial Development Concept 2030, MP 2012, item 252.

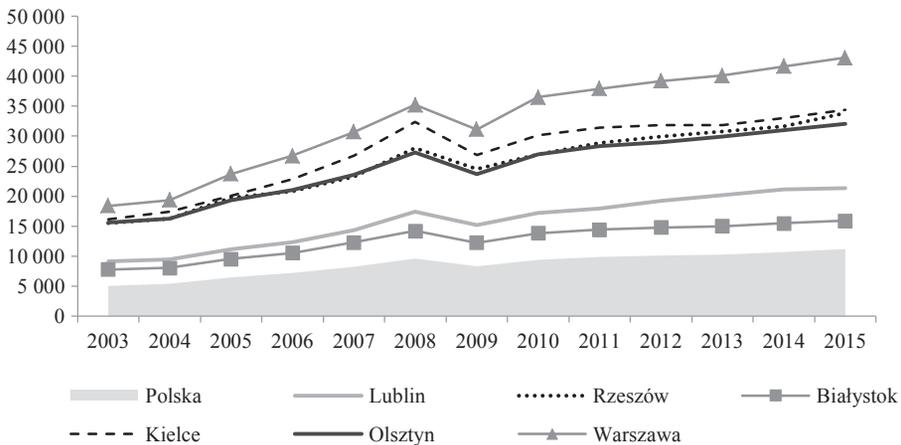


Fig. 8. GDP per capita in current prices for 2003-2015 (in EUR)

Source: author's own study based on data on data from Eurostat, <https://ec.europa.eu/eurostat/data/database>.

The first group included: Warszawa, Kraków, Gdańsk, Gdynia, Wrocław, Poznań, Katowice (the Upper Silesian agglomeration), Łódź, Szczecin, Bydgoszcz, Toruń and Lublin. The second group included the following cities: Białystok, Gorzów Wielkopolski, Kielce, Olsztyn, Opole, Rzeszów, Zielona Góra, whereas the regional centers which are not capitals of voivodeships, but have a large population included: Częstochowa, Radom, Bielsko-Biała, Rybnik, Płock, Elbląg, Wałbrzych, Włocławek, Tarnów, Kalisz with Ostrów Wielkopolski, Koszalin, Legnica, Grudziądz, and Słupsk. From the point of view of the conducted analysis it should be noted that among the cities in Eastern Poland particular significance was assigned to Lublin as one of the basic centers of importance for the development of the country's economy. Kielce and Białystok do not have airports, which affects their position in the national spatial development plan regardless of their development dynamics.

6. Conclusion

The results of the research showed growing disproportions in economic development between the regions of Eastern Poland and the national average within the examined indicators. An exception to this rule were the demographic burden and natural growth rates, which in the Warmińsko-Mazurskie and Podkarpackie voivodeships were positive. Such a situation proves not only the petrification of the regional structure of Poland in terms of socio-economic development but, which is equally worrying, the tendency of their growth. All the more important is the matter of the role of capitals of Eastern Poland's regions as growth poles and the evaluation of their development

dynamics. The research showed that the highest dynamics of registered business entities per 10,000 residents in the period 2003-2017 was observed in Rzeszów (the capital of the Podkarpackie Voivodeship) and Lublin (the capital of the Lubelskie Voivodeship). This means that they showed the highest growth of economic potential out of the five capitals of Eastern Poland's regions. Measuring entrepreneurship with the employment rate per 1,000 residents, the best indicators were achieved by the same cities, i.e. Rzeszów and Lublin. Rzeszów again had the best results in the analyzed period as regards the ratio of the number of people of non-working age to the number of people of working age. Positive migration balance dynamics were observed in Rzeszów and Lublin. The analysis of indicators is reflected in the formulated collective index of the level of development of cities that are capitals of Eastern Poland's regions. Rzeszów was characterized by the highest dynamics of development level according to the index in the analyzed years, which was also reflected in the positive migration balance. On the other hand Lublin, with positive values of the analyzed indicators in comparison to other capitals, is ranked last according to the collective development index of the analyzed cities. In the entire analyzed period it can be concluded that Rzeszów developed the most. An important element of the analysis was the determination of the impact of the capitals, i.e. the largest concentrations of population, infrastructure, financial, social and human capital on regional development. The research showed that only in the case of Lublin and Rzeszów there was a statistically positive correlation between the position in the development index and the value of GDP per capita in the region. This means that the development processes taking place on many levels in other capitals of Eastern Poland's regions do not translate into the economic indicators of regions. A separate issue is to what extent the dynamics of the regional capitals with the lowest socio-economic indicators influence the processes of regional development. The leaders in the collective development index and analyzed indicators, i.e. Rzeszów and Lublin, are the voivodeship capitals which, according to the research in comparison with other Eastern Poland's voivodeships, do not occupy leading positions. Podkarpackie (capital city – Rzeszów) and Lubelskie (capital city – Lublin) take the lowest position among the five surveyed voivodeships in terms of the average number of entities per 10,000 residents, GDP per capita, natural persons conducting business activity per 1,000 residents. The other analyzed indicators are also unfavorable. This may mean that the fastest growing capitals (Rzeszów, Lublin) are enclaves that do not generate development impulses for regions. This phenomenon is particularly interesting from the point of view of the contemporary evaluation of the theory of growth poles and core-periphery theories. This is a premise for conducting in-depth research which may provide an answer to whether in the area of Eastern Poland's regions there are processes of stimulating regional development by the largest cities or leaching resources from regions supporting the development of their capitals and the largest urban centers.

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