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TERRITORIAL DIFFERENTIATION OF UNEMPLOYMENT IN MAZOVIA IN THE YEARS 2004-2013

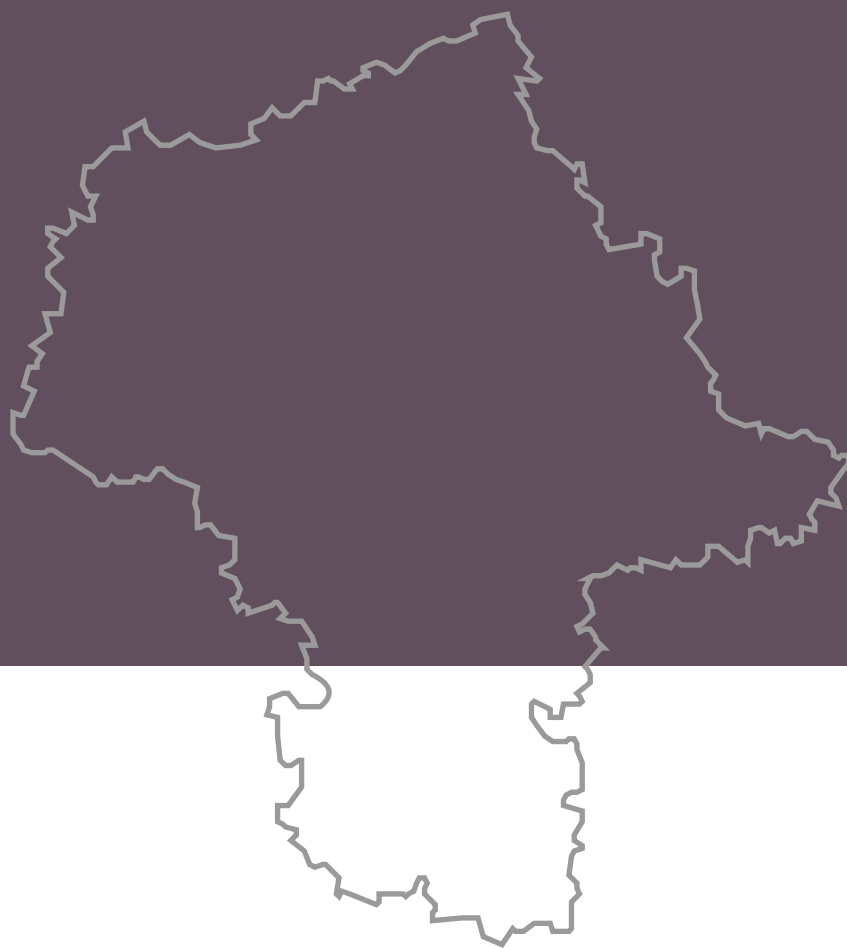


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INTRODUCTION

While analysing statistical indicators for the whole Mazowieckie voivodship one can have the impression that Mazovia as the richest region is the one the at the lowest risk of unemployment. However, the overall unemployment rate, relatively low in comparison with other regions, does not reflect the specific situation on the local labour markets. Mazowieckie voivodship is a region of great contrasts regarding the labour market. On the one hand there is Warsaw, where the unemployment rate is one of the lowest in the country (as of the end of December 2013 – 4.8%), on the other hand there are powiats with unemployment rate much above the average.

Since many years the most difficult situation occurs on the labour markets located peripherally with respect to the capital city. At the end of December 2013 the difference between the lowest and the highest unemployment rate in Mazovia was 34.1 percentage points. A fact worth stressing is that Mazowieckie voivodship has the largest number of registered unemployed persons – one in eight unemployed people in Poland resides in Mazovia. High degree of territorial differentiation of unemployment is a result of both uneven socio-economic development of the regions and their geographical location. Geographical location of a powiat, distance from major cities or the degree of development of the infrastructure often have impact on the level of economic development or human capital development and are decisive for how quickly an individual can find a job adequate to qualifications possessed. However, the accession to the European Union (EU) has brought opening of the labour market and increased opportunities for undertaking employment not only in the home country but also abroad. As a result, residence in a particular powiat no longer limits its inhabitants to look for work only in the nearest neighbourhood¹.

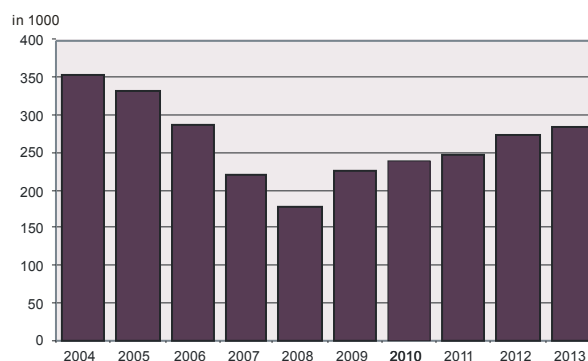
Bearing in mind the above, this analysis attempts to present territorial differentiation of unemployment in Mazovia. It identifies groups of powiats which are uniform with respect to the level of unemployment and its differentiation according to selected socio-demographic characteristics. The analysis was performed using one of the clustering methods, i.e. Ward's method. Data only refer to the unemployed registered in the powiat labour offices and those looking for work through these institutions. The paper uses information drawn from the Ministry of Labour and Social Policy reports (form MPiPS-01) compiled by the powiat labour offices. The analysis was performed using SPSS software.

¹ *Terytorialne zróżnicowanie bezrobocia w Polsce w 2012 r.* Ministerstwo Pracy i Polityki Społecznej Departament Rynku Pracy, Warszawa 2013

REGISTERED UNEMPLOYMENT IN MAZOVIA IN THE YEARS 2004-2013

As of the end of December 2004 there were 353.0 thousand unemployed people registered in powiat labour offices. In the subsequent four years the number of jobseekers was decreasing. These changes were connected with the economic prosperity observed at that time, which had been caused by both worldwide improvement of economic prosperity and Poland's integration with the EU. In 2008 the number of the unemployed was the lowest in the whole analysed period – 178.0 thousand. Since 2009 the number of unemployed registered in the powiat labour offices has been increasing every year. The largest increase was observed in 2009 – when the unemployment increased by 46.5 thousand people, to reach 224.5 thousand. At the end of 2013 there were 283.2 thousand people on unemployment roll, i.e. by 11.3 thousand more than a year earlier. The observed changes were caused by the worldwide financial crisis and the economic slowdown in Poland.

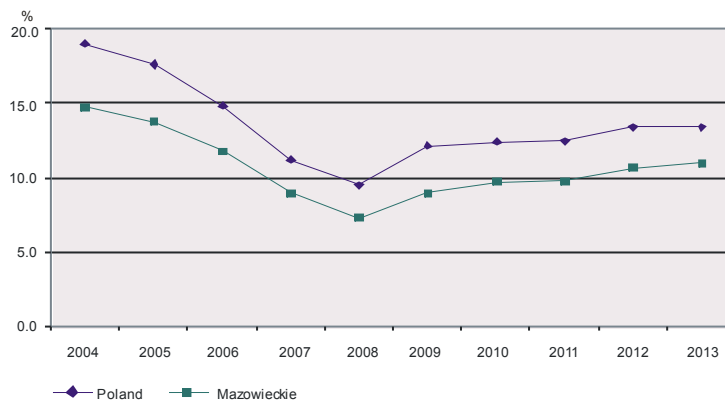
Graph 1. **Registered unemployed in Mazowieckie voivodship in the years 2004-2013**
As of the end of December



Territorial differentiation of the labour market situation is usually presented through the unemployment rate². In Mazowieckie voivodship registered unemployment rate at the end of December 2013 equalled 11.0%, i.e. by 3.7 percentage points less than in the analogous period of 2004, and by 3.7 percentage points more than in 2008 when its value had been the lowest. As can be seen in the graph below, unemployment rate in Mazowieckie voivodship between 2004 and 2013 remained lower than the unemployment rate for the whole country.

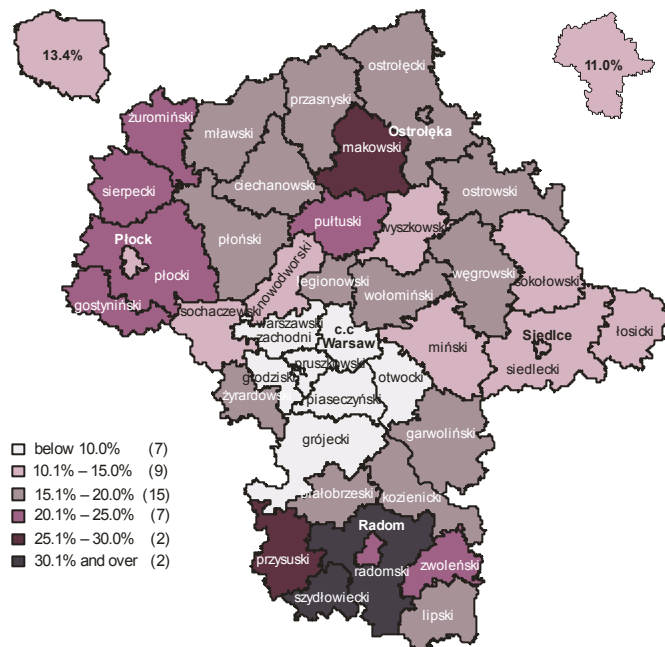
² Proportion (%) of the unemployed population in the number of economically active civilian population, excluding persons in active military service as well as employees of budgetary entities conducting activity within the scope of national defence and public safety.

Graph 2. Registered unemployment rate
As of the end of December



On the powiat level, unemployment rate has the lowest values in the capital city of Warsaw (4.8%) whereas the highest – in the south of the voivodship, in the following powiats: szydłowiecki (38.9%), radomski (30.1%) and przysuski (27.6%). In December 2013 the difference between the powiats with the lowest and the highest employment rates was 34.1 percentage points, with fifteen powiats recording below average unemployment rate and twenty seven – above the country average (13.4%).

Map 1. Registered unemployment rate by powiats in 2013
As of the end of December

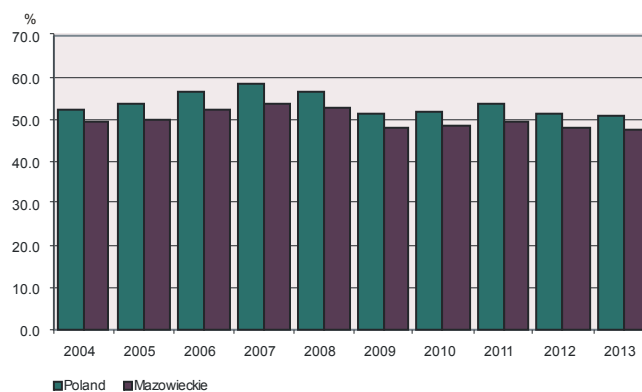


Number of powiats in brackets.

In December 2004 there were 174.5 thousand women and 178.5 thousand men on unemployment roll, hence women constituted 49.4% of all unemployed in Mazovia. In the years 2005-2008 women outnumbered men on unemployment rolls whereas since 2009 majority of the

unemployed have been male. At the end of 2013 the proportion of women was 47.2%; among the unemployed population there were 90 women per 100 men. In contrast, in the whole of Poland women were out of work more often. Over the whole analysed period majority of the unemployed in the country were women – in 2013 their proportion in the structure of the unemployed equated to 51.0%, with 104 unemployed women per 100 unemployed men.

Graph 3. Proportion of women in the total number of the unemployed
As of the end of December



At the end of December 2013 the highest proportion of women in the total number of the unemployed was registered in the towns with powiat status: Płock (52.7%) and Ostrołęka (52.3%), whereas the lowest – in garwoliński (37.6%) and wołomiński (42.8%) powiats.

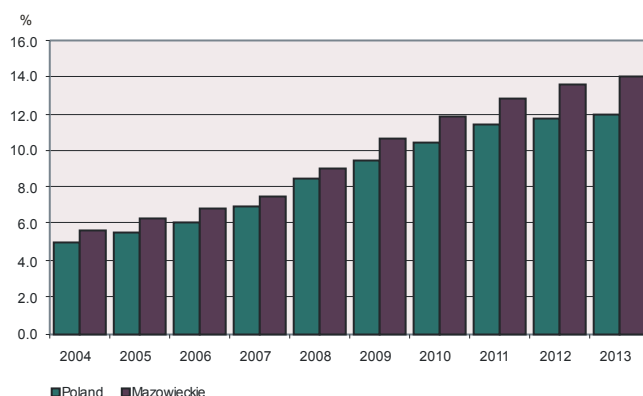
One of the causes of difficulties in finding a job was low educational level. The largest number of people without work in Mazowieckie voivodship had basic vocational, lower secondary or lower education. In the years 2004-2013 there was a rapid decrease in the number of unemployed in both of these categories, from 228.6 thousand to 148.1 thousand people. It resulted in a diminishing proportion of less educated people in the total number of jobseekers, accompanied with a growth of the proportion of the unemployed with tertiary or general secondary education. The percentage of people with the lowest educational levels (lower secondary or lower, basic vocational) decreased by 12.5 percentage points. Registered increase of the proportion of people with tertiary education was 8.4 percentage points, and with general secondary education – 4.4 percentage points.

Table 1. Unemployed people by the level of education in Mazowieckie voivodship
As of the end of December

Specification	2004		2013	
	Number of people	Structure (%)	Number of people	Structure (%)
Total	352 946	100.0	283 196	100.0
Of which by the level of education:				
tertiary	19 841	5.6	39 609	14.0
post-secondary and vocational				
secondary	79 783	22.6	63 113	22.3
general secondary	24 686	7.0	32 393	11.4
basic vocational	115 608	32.8	71 691	25.3
lower secondary and less	113 028	32.0	76 390	27.0

Increase of the number of unemployed people with tertiary education results first of all from the expansion of the population attaining this educational level. The results of the 2011 National Census of Population and Housing show that in Mazowieckie voivodship, in comparison with 2002, the proportion of people with tertiary education in the population aged 13 and more increased by 9.8 percentage points (from 13.8% in 2002 to 23.6% in 2011). This situation indicates that people graduating from higher education institutions upon entering the labour market face large problems, which may stem from many causes i.a. from the lack of fit between the most popular fields of studies and the needs of the local labour market, or from relatively high expected salary for which the unemployed people would be willing to undertake employment.

Graph 4. Proportion of people with tertiary education in the total number of the unemployed
As of the end of December

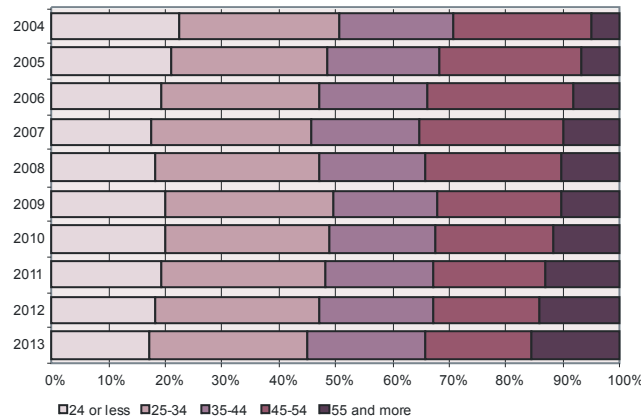


As of the end of December 2013, the highest proportion of people with tertiary education in the unemployed population was registered in the towns with powiat status: Warsaw (25.7%) and

Siedlce (20.4%) and in pruszkowski powiat (17.4%), whereas the lowest in the powiats: makowski (6.2%), garwoliński (7.2%) and szydłowiecki (7.4%).

Another factor which many a time is decisive for the easiness of getting a job, apart from the situation in the given labour market, is age.

Graph 5. Structure of the unemployed population by age groups in the years 2004-2013 in Mazowieckie voivodship
As of the end of December



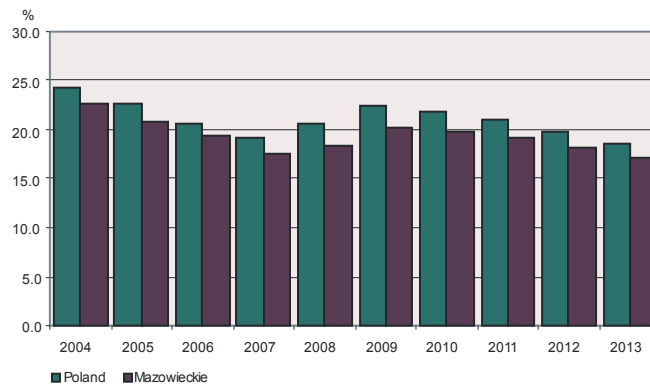
Statistical data confirm that unemployment affects first of all young people. Both at the end of 2004 and at the end of 2013 the largest group among the unemployed consisted of people aged 25-34, the proportion of this age group in the structure of the unemployed population equated to 27.8% and 27.9%, respectively. However, it is the younger age group, up to 25 years of age, who, according to Art. 49 of the act on promoting employment and labour market institutions³ were identified as being in special labour market situation. People aged 24 or less are highly adaptive and mobile, but lack professional experience. Difficult entry position on the labour market is also a consequence of the schools' lack of adjustment to the demands of the market, as they educate in professions for which the demand is not large.

At the end of 2004 on the offices' unemployment roll there were 79.9 thousand people aged 24 or less and their percentage in the total number of the unemployed was 22.7%. After a short term fall, followed by an increase of the size of this age group, at the end of 2013 the number of unemployed people aged 24 or less was 48.3 thousand (17.1% of the total). Also the people in older age groups are in difficult position on the labour market. People aged 55 and more have a large professional experience but are less mobile, less willing to learn new skills or to change profession.

³ Act of 20 April 2004 on promoting employment and labour market institutions (Journal of Laws of 2004, No. 99, item 1001 as amended).

Over the analysed period the number of people in this age category increased from 18.2 thousand in 2004 to 44.3 thousand in 2013.

Graph 6. Percentage of people aged 24 or less in the total number of the unemployed
As of the end of December



On the level of powiats the lowest proportion of young people was registered in the capital city of Warsaw (8.5%), warszawski zachodni powiat (11.7%), pruszkowski powiat and city of Radom (both 12.4%), whereas the highest – in the following powiats: białobrzeski, sokołowski (both 30.6%), siedlecki (29.8%) and ostrołęcki (29.3%). It is connected to better opportunities of finding a job in larger cities (Warsaw, Radom) or in the case of powiats located near the capital city – profiting from Warsaw’s labour market. As regards people aged 55 and more the largest proportion of this age category in the total number of registered unemployed was recorded in warszawski zachodni powiat (20.7%), capital city of Warsaw (20.4%) and pruszkowski powiat (20.2%), whereas the lowest – in siedlecki (6.9%), ostrołęcki (7.8%) and sierpecki (8.7%) powiats.

One of the most dangerous phenomena in the labour market is staying out of work for a prolonged time. Long-term unemployed people are especially prone to exclusion from the labour market as several months without work contributes to depreciation of their professional skills and qualifications, at the same time having a demotivating effect on the unemployed themselves and reducing their attractiveness in the eyes of employers⁴.

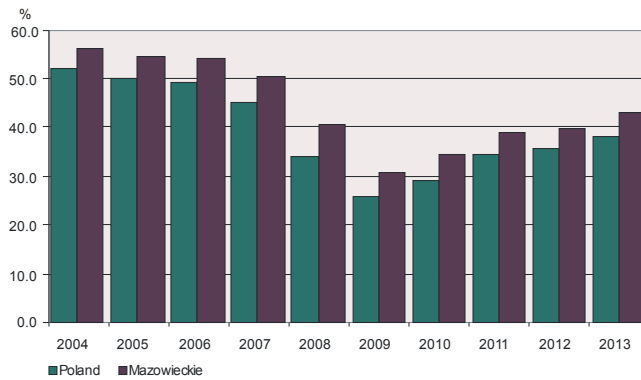
Staying out of work for a long time causes psychological changes in the unemployed people. Long-term unemployment brings social isolation of both an individual and his or her family. For people belonging to this category being unemployed becomes, to a growing extent, a way of living. Activating them is much more difficult than activating people who have been unemployed for a shorter period. People remaining without employment in many a case become beneficiaries of social

⁴ *Polska 2010 Raport o rynku pracy oraz zabezpieczeniu społecznym* Ministerstwo Pracy i Polityki Społecznej, Warszawa 2010

assistance. Long-term unemployment contributes to the danger of social pathology, reduces chances of finding work, hence resulting in the material and social degradation of an individual and his or her family⁵.

Graph 7. Proportion of the unemployed remaining out of work longer than one year in the total unemployed population

As of the end of December



At the end of 2013 labour offices in Mazowieckie voivodship had on their roll 121.6 thousand people remaining unemployed over 12 months. Percentage share of this category of the unemployed in the total number of the registered unemployed decreased from 56.0% at the end of 2004 to 42.9% at the end of 2013. The lowest percentage in the analysed period was observed in 2009 – 30.8%. One should stress that the proportion of people staying out of work over 12 months in Mazowieckie voivodship has been constantly above the level for the whole country over the whole analysed period. At the end of 2013 the largest proportion of this category of the unemployed was recorded in przysuski (55.9%) and makowski (55.2%) powiats, whereas the lowest – in grodziski (24.2%) and otwocki (27.2%) powiats.

⁵ *Bezrobotni pozostający bez pracy powyżej 12 miesięcy od momentu zarejestrowania się. Analiza zmian w latach 1993-2008. Długotrwale bezrobotni. Analiza zmian w latach 2005-2008.* Ministerstwo Pracy i Polityki Społecznej Departament Rynku Pracy, Warszawa 2009

THE PROFILE OF AN UNEMPLOYED PERSON IN POLAND AND IN MAZOVIA

POLAND



Sex: female
Age: 25-34
Education: basic vocational
Work experience: none
Length of unemployment: over 12 months

2004

MAZOWIECKIE

Sex: male
Age: 25-34
Education: basic vocational
Work experience: none
Length of unemployment: over 12 months



POLAND



Sex: female
Age: 25-34
Education: basic vocational
Work experience: 1-5 years
Length of unemployment: over 12 months

2013

MAZOWIECKIE

Sex: male
Age: 25-34
Education: lower secondary or lower
Work experience: 1-5 years
Length of unemployment: over 12 months



DIFFERENTIATION OF THE PHENOMENON OF UNEMPLOYMENT ON THE LEVEL OF POWIATS

High spatial differentiation is a problem of the labour market in Mazovia. On the one hand there is the economically well developed Warsaw and its metropolitan area, on the other – less developed powiats situated peripherally with respect to the capital city. Wide range of values of the unemployment rate is good evidence for this spatial differentiation, hence this indicator has been adopted as one of the criteria for the division of powiats into homogeneous groups. The following variables have been assumed as significant:

x_1 — registered unemployment rate,

x_2 — proportion of women in the total number of the unemployed,

x_3 — proportion of unemployed people staying out of work over a year in the total number of the unemployed,

x_4 — proportion of people with tertiary education in the total number of the unemployed,

x_5 — proportion of people aged 24 or less in the total number of the unemployed.

These variables have been analysed with respect to their variability and level of correlation, in order to eliminate the ones which are poorly dispersed or contain repetitive information. The coefficient of variation of $v = 0.10$ and correlation coefficient of $r = |0.75|$ have been adopted as cut off values. All the selected variables have satisfied these criteria. Due to the fact that the variables were measured on different scales they had to be standardised in order to provide comparability. This has been done according to the formula:

$$z_{ij} = \frac{x_{ij} - \bar{x}_j}{s_j}$$

where:

x_{ij} — value of the j variable in the powiat i

\bar{x}_j — arithmetic mean,

s_j — standard deviation.

The standardisation has produced a matrix of the values of variables z . The next step was grouping the objects using one of the hierarchical clustering methods, i.e. Ward's method. In this approach the distance between groups is defined as the modulus of the difference between the sums of squared distances between the points and the centre of the clusters to which the points

belong⁶. The clustering has been performed using Euclidean distances. The procedure has been conducted using SPSS software. The result was the spatial classification of 42 powiats into groups with respect to the values of five diagnostic variables in two years: 2004 and 2013. The clustering yielded four clusters of powiats the most similar to each other with respect to the selected characteristics. The results of clustering of powiat have been presented in Table 2 and their spatial distribution – in Maps 2 and 3.

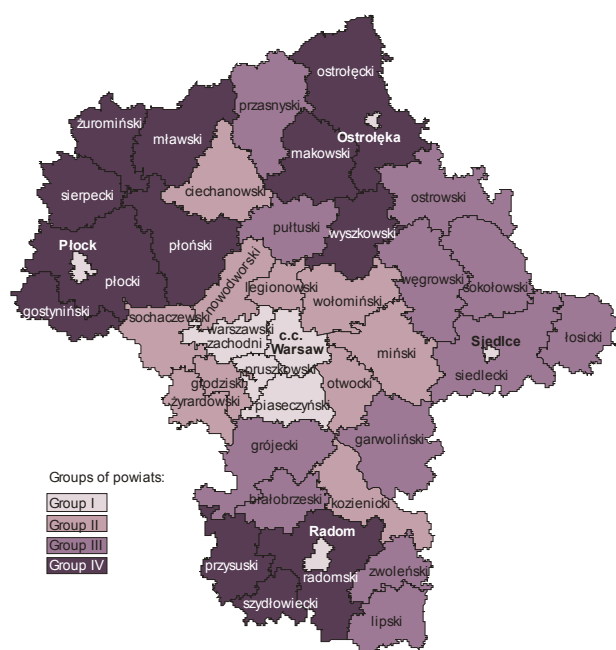
Table 2. Classification of powiats according to the situation on their labour markets in the years 2004 and 2013

Group	Powiat	Classification in 2004	Classification in 2013	Change of cluster
I – the best situation in the labour market in 2013	grodziski	II	I	increase
	Ostrołęka	I	I	no change
	Płock	I	I	no change
	Radom	I	I	no change
	Siedlce	I	I	no change
	c.c. Warsaw	I	I	no change
	otwocki	II	I	increase
	piaseczyński	I	I	no change
	pruszkowski	I	I	no change
	warszawski zachodni	I	I	no change
II – good situation in the labour market in 2013	białobrzeski	III	II	increase
	ciechanowski	II	II	no change
	garwoliński	III	II	increase
	legionowski	II	II	no change
	lipski	III	II	increase
	łosicki	III	II	increase
	miński	II	II	no change
	nowodworski	II	II	no change
	pułtuski	III	II	increase
	siedlecki	III	II	increase
	sochaczewski	II	II	no change
	sokołowski	III	II	increase
	węgrowski	III	II	increase
	wołomiński	II	II	no change
	wyszkowski	IV	II	increase
	zwoleński	III	II	increase
żyrardowski	II	II	no change	
III – bad situation in the labour market in 2013	gostyniński	IV	III	increase
	grójecki	III	III	no change
	kozienicki	II	III	decrease
	mławski	IV	III	increase

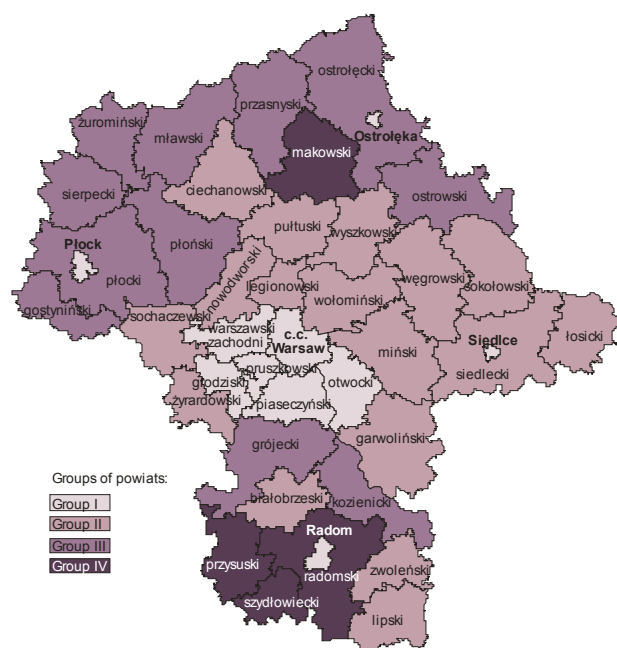
⁶ J. Runge *Metody badań w geografii społeczno-ekonomicznej – elementy metodologii, wybrane narzędzia badawcze*, Wydawnictwo Uniwersytetu Śląskiego, Katowice 2007

	ostrołęcki	IV	III	increase
	ostrowski	III	III	no change
	płocki	IV	III	increase
	płoński	IV	III	increase
	przasnyski	III	III	no change
	sierpecki	IV	III	increase
	żuromiński	IV	III	increase
IV – the worst situation in the labour market in 2013	makowski	IV	IV	no change
	przysuski	IV	IV	no change
	radomski	IV	IV	no change
	szydłowiecki	IV	IV	no change

Map 2. Classification of powiats according to the situation on their labour markets in 2004



Map 3. Classification of powiats according to the situation on their labour markets in 2013



Group I consisted of powiats in which the situation measured by the selected variables was relatively the best. In 2013 this group comprised the capital city of Warsaw, five powiats near the capital: piaseczyński, pruszkowski, warszawski zachodni, grodziski, otwocki and all the other towns with powiat status: Radom, Siedlce, Płock and Ostrołęka. Such a distribution is evidence of the dominant role of the Warsaw labour market and of the relatively good situation on the labour markets of the former voivodship capitals. In 2004 this group consisted of eight powiats, in 2013 they were joined by otwocki and grodziski powiats.

Group II, of the powiats with good situation on their labour markets in 2013, was formed of 17 powiats. In comparison with 2004 this group expanded by seven powiats. Ten powiats moved to this group from the ones with worse labour market situation and seven remained in the same group as in 2004.

Group III is a cluster of powiats with a bad labour market situation. In 2013 it comprised 11 powiats, i.e. by one less than in 2004. Only three powiats kept their position of 2004, six powiats moved up from group IV and only one (kozienicki) dropped from group II.

The powiats in the worst situation with respect to the unemployment level were classified in group IV. In 2013 this group consisted of four powiats (makowski, przysuski, radomski and szydlowiecki), while in 2004 the group comprised 12 powiats.

Analysing these results one can note that the majority of groups consisted of neighbouring powiats, and the territorial concentration of these powiats confirms that it is the proximity of Warsaw that causes such a significant improvement of the situation in the local labour markets. Another fact worth stressing is that powiats neighbouring with the left-bank side of Warsaw are in better situation.

When comparing the results of clustering for 2004 and for 2013, one has to notice that the groups did not always consist of the same powiats. Powiats moving across the proposed classification represents the tendencies connected with the decrease of the number of powiats in bad labour market situation and the increase of the ones, where the labour market situation has improved.

Table 3. Number of powiats assigned to each group in the years 2004 and 2013

Group	Number of powiats in 2004	Number of powiats in 2013	Difference
I	8	10	+2
II	10	17	+7
III	12	11	-1
IV	12	4	-8
Total	42	42	-

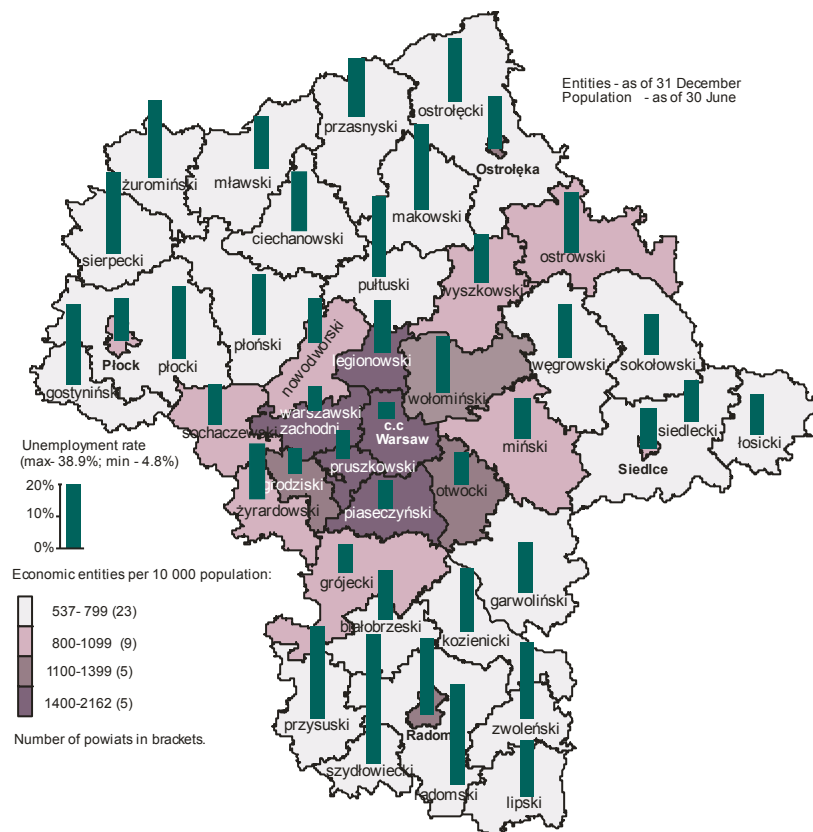
In 2013 the number of powiats concentrated around the capital city, classified into group II increased. Such a situation can be evidence of the larger threshold of the capital city's labour market, caused for example by better connectivity.

The most favourable change over the analysed period has been registered in the case of wyszkowski powiat. In 2004 it was classified in group IV, while in 2013 – in group II. Change of group upwards (by two levels) suggests a significant improvement of the situation on the local labour market. Therefore this powiat will be subject of a more in-depth analysis. Another powiat selected for such a detailed analysis is kozienicki, which was the only one to move from a higher-ranking group to a lower one (from group II to III).

It is also worth emphasizing that in 2013 the size of group IV, which had the highest level of unemployment, decreased. The fact that eight powiats have moved to a higher-ranking group can be a proof of the improvement of the situation on the local labour markets.

A very significant factor affecting the level of unemployment is the scale of the local entrepreneurship. As can be seen in the map below, the powiats in which the number of entities of the national economy per 10 000 inhabitants is high, register low unemployment rate. The highest values of entrepreneurship rate were registered in Warsaw and powiats located in its proximity, whereas the most difficult situation was observed on the labour markets of powiats situated peripherally. Low scale of entrepreneurship in these areas and their inconvenient connection to the larger centres are among the factors affecting the level of unemployment.

Map 4. Entities of the national economy per 10 000 population and registered unemployment rate in 2013



ANALYSIS OF THE LOCAL LABOUR MARKETS IN WYSZKOWSKI AND KOZIENICKI POWIATS

The results of the conducted analysis have shows that the most favourable change over the studied period has been registered in the case of wyszkowski powiat. In 2004 it was classified in group IV, while in 2013 – in group II. Moving between group upwards (by two levels) suggests a significant improvement of the situation on the local labour market. A reverse situation is observed in the case of kozienicki powiat, which is the only one to move between groups downwards (from group II to III). In order to identify the causes of the improvement/worsening of the situation on the local labour market, these powiats will be subject to more detailed analysis.

Wyszkowski powiat is located 55 km north-east from Warsaw. It has the area of 876 km². The powiat consists of five rural gminas: Brańszczyk, Długosiodło, Rząśnik, Somianka and Zabrodzie, and an urban-rural gmina Wyszaków, including a town with over 27 thousand inhabitants. As of 31 December 2012 wyszkowski powiat had 73 817 inhabitants.



The powiat has an agricultural-industrial character; in 2012 agricultural land constituted 59,1% of the area. As of the end of December 2013, the powiat was the site of 6 098 entities of the national economy registered in REGON register, i.e. 826 per 10 000 population. Among them 81.4% are natural persons conducting economic activity, and 96.3% are micro-enterprises (with up to 9 employed people). The registered entities most often conducted activities related to retail and repair of motor vehicles (25.7%), construction (17.3%) as well as transportation and storage (8.8%). In 2012 in the powiat there were 19 790 employees⁷. Among all of the employed people 43.2% worked in agriculture, forestry and fishery, 20.7% in industry and construction, and in other services – 19.3%.

⁷ Excluding economic entities with up to 9 employed people, including private farms, according to the actual place of work and kind of activity.

Kozienicki powiat is located in the southeastern part of Mazowieckie voivodship. It covers the area of 916 km². As of 31 December 2012 the powiat had 62 275 inhabitants. The powiat consists of six rural gminas: Garbatka-Letnisko, Głowaczów, Gniewoszków, Grabów nad Pilicą, Magnuszew, Sieciechów and an urban-rural gmina Kozienice including a town with over 18 thousand people.



Kozienicki powiat is an agricultural-industrial powiat, in 2012 agricultural land covered 57.8% of its area. As of the end of December 2013 in the powiat 4 102 entities of the national economy were registered in REGON register, i.e. 660 per 10 000 population. Among them 79.6% were natural persons conducting economic activity, and 94.8% were micro-enterprises. The registered entities most often conducted activity related to retail and repair of motor vehicles (27.6%), construction (14.9%) and industrial manufacturing (9.2%).

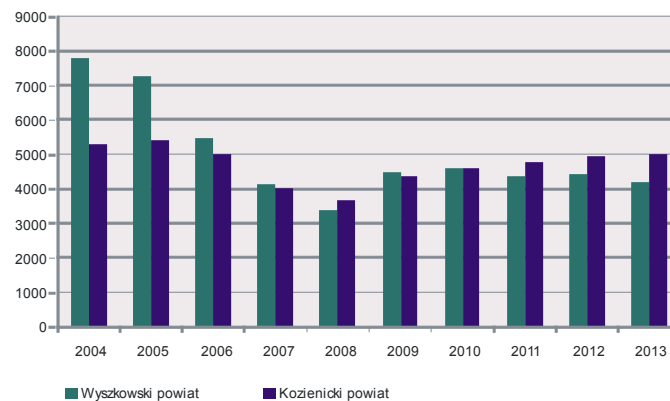
The largest enterprise functioning in the powiat is ENEA Wytwarzanie, which owns i.a. the power station “Kozienice”, located in Świerże Górne. Important places on the economic map of the powiat belong to „Esselte Polska” Sp. z o.o. (producer of stationery), Spółdzielnia Inwalidów (cooperative of the disabled workers) in Kozienice, Mleczarnia Obory Sp. z o.o. – creamery incorporated in the Lactalis Poland group, Zakłady Silikatowe „Żytkowice” (calcium silicate brick producer), Fabryka Domów „Bogucin”, Prefabet Kozienice SA (producer of precast concrete units)⁸. In 2012 in the powiat there were 18 069 employees. Among all of the employed people 43.6% worked in agriculture, forestry and fishery, 29.4% in industry and construction, and in other services – 19.8%.

As stems from the data presented above, wyszkowski and kozienicki powiats have much in common: a similar area, size of the population or location with respect to Warsaw: both are not direct neighbours of Warsaw. Wyszowski powiat is separated from the capital city by wołomiński powiat, whereas between Warsaw and kozienicki powiat there are three other powiats: otwocki, piaseczyński and grójecki. However, the situation on their labour markets differs significantly.

In December 2004 the number of registered unemployed on the roll of labour offices was 7 765 in wyszkowski and 5 312 in kozienicki. After all the ups and downs over the analysed period, at the end of 2013 the number was 4 221 and 4 974 people. In wyszkowski powiat the number of the unemployed decreased by 45.6% while in kozienicki – by 6.4%.

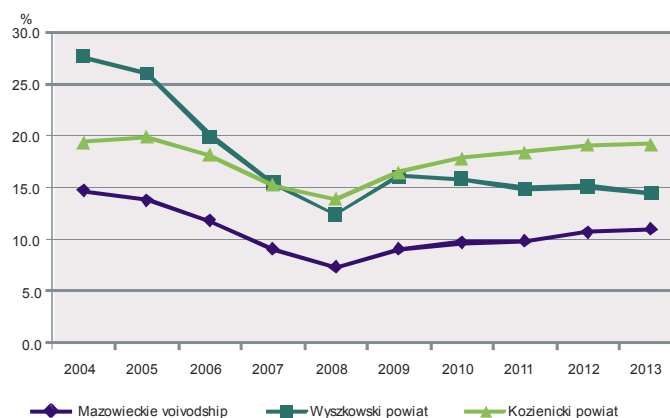
⁸ Source: <http://www.kozienicepowiat.pl/charakterystyka.html>, accessed on 01.04.2014.

Graph 8. Registered unemployed in the two selected powiats in the years 2004-2013
As of the end of December



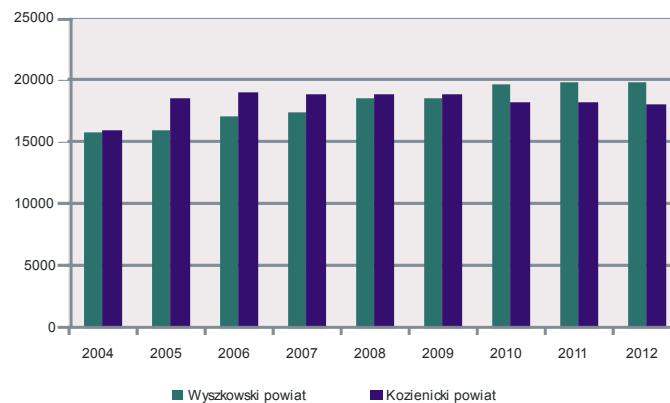
The change of situation on the local labour markets is also confirmed by the level of the unemployment rate. In 2004 the value of this indicator in wyszkowski powiat was 27.6%, i.e. by 8.2 percentage points more than in kozienski powiat. Between 2004 and 2013 the unemployment rate in wyszkowski powiat has decreased by 13.1 percentage points, while in kozienski – by 0.2 percentage points. In Mazowieckie voivodship over the same period a decrease by 3.7 percentage points has been observed. In 2013 in wyszkowski powiat the unemployment rate equalled 14.5% and was by 4.7 percentage points lower than in kozienski powiat, which is evidence for a significant improvement on the local labour market of wyszkowski powiat and of stagnation in kozienski powiat.

Graph 9. Registered unemployment rate
As of the end of December



The improvement of the labour market situation in wyszkowski powiat can also be seen in the increasing number of employed people. In kozienski powiat the number of the employed has also been on the rise but the increase between the years 2004 and 2012 was lower than the one registered in wyszkowski powiat (12.8% compared with 25.9%).

Graph 10. Employed people in selected powiats in the years 2004-2013
As of the end of December

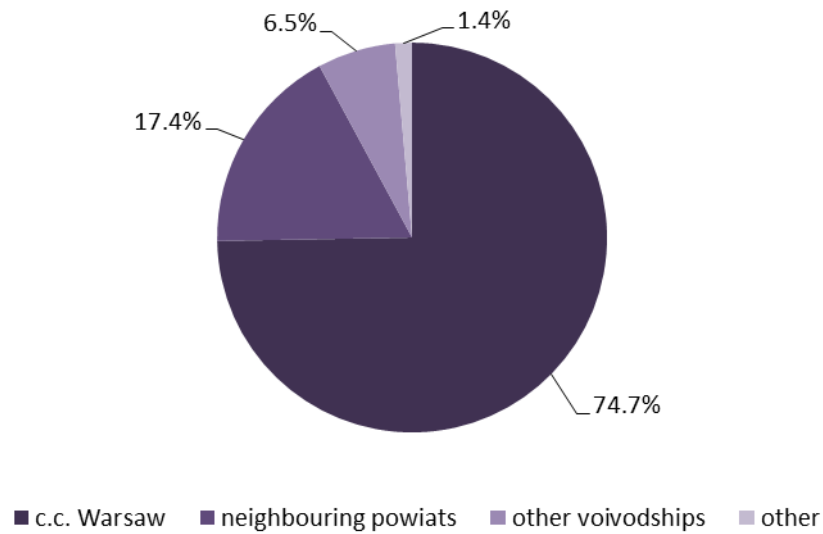


When analyzing the number of economic entities registered in REGON register, one can notice an increase in both powiats. At the end of 2013 in wyszkowski powiat there were 6 098 entities, i.e. by 3.4% more than in 2004. In koziernicki powiat an increase by 2.2% has been recorded, bringing the number of registered entities to 4 102 in 2013. A higher number of economic entities, through creating new work places, favours the development of the local labour market.

Also the relatively small distance from Warsaw increases the chances of finding a job outside one's place of residence. According to the results of the National Population Census of 2011 with respect to commuting, among employees⁹ in wyszkowski powiat 5 669 people declared work outside their gmina of residence. Among the commuters, 66.7% declared commuting to a workplace located outside wyszkowski powiat. Almost every second person declared commuting to Warsaw, which is favoured by the convenient transport connection with the capital city. Opening of the express route S8 resulted in a significant shortening of the travel time to Warsaw, which might have contributed to the fact that more people decided to work in the capital city. Over 17% of the employees commuting outside wyszkowski powiat worked in gminas located in the neighbouring powiats.

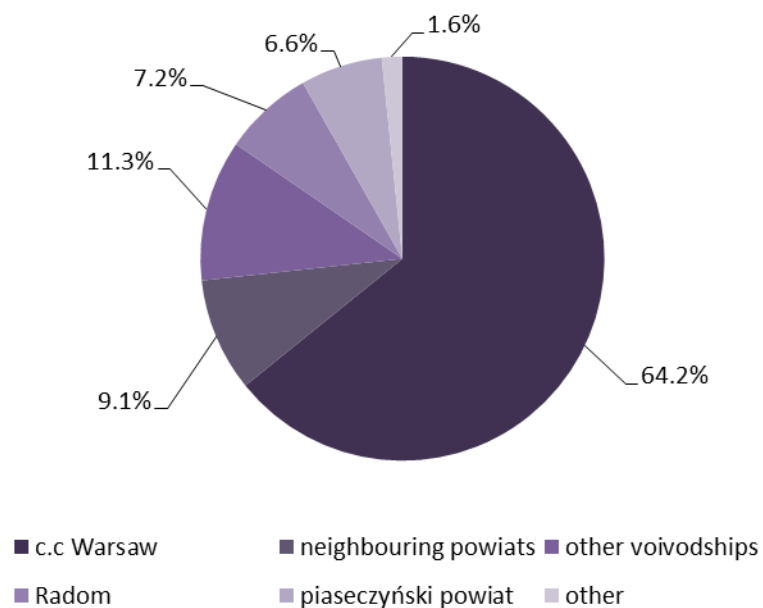
⁹ Data refer to employees, whose workplaces are located outside the administrative borders of their gmina of residence. The results cover only the flows above nine people.

Graph 11. Inhabitants of **wyszkowski powiat** who commute to workplaces outside the powiat, according to the results of the National Population Census of 2011



The situation in **kozienicki powiat** was slightly different. Less people than in **wyszkowski powiat** declared working outside their gmina of residence – 6 248. However, over half (51.2%) of these people worked in gminas located within the same powiat, whereas 48.8% declared a workplace outside **kozienicki powiat**. Among the people commuting across powiat borders, people working in Warsaw prevailed (64.2%); other popular locations were neighbouring powiats, Radom and piaseczyński powiat. Among the people working outside the powiat, 11.3% commuted to other voivodships.

Graph 12. Inhabitants of **kozienicki powiat** who commute to workplaces located outside the powiat, according to the results of the National Population Census of 2011



The decrease of unemployment might also be a result of actions undertaken by labour offices in powiats. Apart from activities financed from the Labour Fund, labour offices in both powiats have undertaken actions aimed at raising funds from other sources.

In 2013 the Powiat Labour office in Kozenice continued the implementation of a systemic project "Let's support the unemployed". The project was partly financed from the European Union funds within the framework of the European Social Fund, Human Capital Operational Programme, Sub-measure 6.1.3. In 2013 the value of the project amounted to almost PLN 3.7 million zlotys; the means enabled assisting 428 people with such forms of support as apprenticeships, trainings and one-time funds for launching economic activity¹⁰.

Between 2004 and 2007 Labour office in Wyszaków implemented projects partly financed from the European Social Fund within the framework of Sectoral Operational Programme Development of Human Resources and Human Capital Operational Programme. Since 2004 six projects have been completed with a total value of 7.0 million zlotys; the co-financing from ESF equated 5.3 million zlotys, own contribution – 1.7 million zlotys. Between 2004 and 2007 activation involved 1 502 people.

Since 1 January 2008 the office has been implementing another project, „Maximum Assistance”, co-financed from the European Social Fund within the framework of Human Capital Operational Programme. The main aim of the project has been to undertake activities towards guaranteeing stable and sustainable development, especially in the domain of promotion of employment, including preventing unemployment, moderating the consequences of unemployment and activating the unemployed. Value of the project in the period 2008-2013 was 17.9 million zlotys; of which 15.9 million zlotys was financed by the European Social Fund and 2.0 million was the contribution from other public sources. In total 938 people completed their participation in the programme between 2008 and 2012¹¹.

In both powiats there are Employment Clubs which assist the unemployed in active job search.

Effectiveness of the actions undertaken by labour offices is crucial for any change on the labour market. This applies not only to the activities related to counselling or job intermediation, but also to the targeting of assistance to the unemployed, by sending them to the appropriate trainings, apprenticeships or intervention works. According to the results of the Ranking of the Powiats in

¹⁰ http://www.pup.kozenice.sisco.info/zalaczniki/1338/grudzien_2013_strona_internetowa_03-01-2014_08-31-45.pdf, accessed on 10.04.2014.

¹¹ http://pup.powiat-wyszkowski.pl/downloads/EFS/BILANS_2008_2012.pdf, accessed on 10.04.2014 .

Mazowieckie Voivodship¹² elaborated by the Mazovian Labour Market Observatory powiat wyszkowski ranked first in the domain of the effectiveness of actions of public employment services. This means that this powiat has the greatest number of people undertaking employment after being provided with active support.

Effective action undertaken by the public employment services and good transport connection to Warsaw have caused such a significant improvement of the situation on the local labour market in wyszkowski powiat. As can be seen in the above data, wyszkowski and kozienicki powiats have many similar characteristics and a similar potential, which, however, is better employed by the authorities and inhabitants of wyszkowski powiat.

¹² *Raport: Ranking Powiatów Województwa Mazowieckiego. Taksonomiczna analiza danych o sytuacji na rynku pracy w powiatach województwa mazowieckiego, Mazowieckie Obserwatorium Rynku Pracy, Warszawa 2013*

CONCLUSIONS

The conducted analysis has confirmed that the labour market in Mazowieckie voivodship is strongly differentiated. On the one hand there is the highly developed capital city and its metropolitan area, on the other – areas on the average or low level of development, located peripherally with respect to the capital. Relatively good situation in Warsaw and its surroundings obscures the situation of the powiats in which the problems related to unemployment are the most intense in the whole country: since 2009 sztywniowski powiat registers the highest unemployment rate among all the powiats in Poland.

Analysis of the results of clustering shows that the situation of many powiats has improved in comparison with 2004. However, one has to bear in mind that the labour market situation was very difficult in 2004. Poland's integration with the European Union has caused improvement, however this favourable process was stopped in 2009 when the consequences of the global crisis were felt most strongly on the national labour market. The year 2013 was another one in the row in which the unemployment rate has increased, nevertheless in the majority of powiats the level was still much lower than in 2004.

The situation of the unemployed is the most favourable in Warsaw and the powiats located in the proximity of the capital city. This results from the fact that the inhabitants of the powiats located near Warsaw are able to find employment in the capital city regardless of their education. Warsaw, as the city with economic development based first of all on the services and retail sector, needs both highly qualified specialists, and workforce for simple jobs, not requiring high qualifications¹³. In 2013 the number of powiats qualified to the groups with good and the best labour market situation concentrated around Warsaw increased, which may be evidence of the larger threshold of the metropolitan labour market, caused for example by better connectivity.

The unemployed in the most difficult situation are the ones who live in the powiats located far from Warsaw. The group of powiats with the highest unemployment level comprises powiats located in the south of Mazovia: przysuski, sztywniowski, radomski, as well as makowski powiat lying on the north – these are the areas which should be targeted by a complex programme of combating unemployment in the first place.

¹³ B. Pieliński, *Sytuacja demograficzna, społeczna i ekonomiczna m.st. Warszawy w świetle analizy danych zastanych*, Mazowieckie Obserwatorium Rynku Pracy, Warszawa 2008