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ROLE OF STRUCTURAL FUNDS IN COMBATING UNEMPLOYMENT. CASE ON LOCAL LABOUR MARKET

Abstract. The objective of the paper is showing connections between using financial funds from European Social Fund and unemployment rate in świętokrzyskie voivodeship. Detailed analysis concerns funds allocated for combating unemployment within the Sectoral Operational Programme Human Resources Development for years 2004 – 2006.

Moreover it gives basic information about structural funds in Poland, describes situation on labour market in świętokrzyskie voivodeship, EU's employment policy and labour market processes in świętokrzyskie region.

Key words: structural funds, unemployment, employment policy.

1. INTRODUCTION

Socio-economic situation in Poland is lately constantly getting better. The beginning of those changes was systemic transformation in 1989 but intensification of them started when Poland joined the European Union on May 1, 2004. It resulted in strengthening positive changes in Polish economy. Poland is the European Community member with level of development lower than other member countries. That is why it is essential to take steps towards diminishing those disproportions. Since May 1, 2004 Poland has been able to benefit from post accession instruments such as structural funds, which aim is provision of assistance in reducing the development disparities between regions in order to strengthen the economic and social cohesion.

One of the biggest problems of Polish economy is situation in labour market, especially high unemployment rate. The problem refers the most to świętokrzyskie voivodeship where unemployment rate reaches one of the highest values in Poland. It is the result of different factors for example: low rate of economic development, low urban development of the region (30 cities, 2 832 rural places), restructure processes in companies, decrease of new work places creation rate, but also maladjustment of level and structure of human resources' qualifications

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to the needs of the local labour market. EU's structural funds, especially European Social Fund (ESF), are very effective tools of combating high unemployment in regions.

The objective of the paper is showing the influence of using and implementing programmes financed from ESF in the period 2004-2006 in świętokrzyskie voivodeship on unemployment rate changes in the region. It should be mentioned at the beginning that precise analysis of above connections will be possible in longer perspective because of the fact that most of the programmes are still in progress. This paper concerns projects implemented by Voivodeship Labour Office in Kielce that is implementing institution for Measures 1.2 and 1.3 of Sectoral Operational Programme Human Resources Development (SPO RZL) and Measures 2.1, 2.3, 2.4 of the Integrated Regional Operational Programme (ZPORR).

2. STRUCTURAL FUNDS – BASIC INFORMATION

Structural funds are the European Union's structural policy instruments. Their aim is to support restructure and modernization of economy of member countries to increase economic and social integration of the Community. Funds are directed to those sectors of economy or regions which without that help are not able to reach the average economic level of the EU's countries. Within the European Union there are very well developed regions and those where level of development is different than "European average". Structural policy and financial support from structural funds are to help governments and local authorities of less developed regions to solve their the most important economic problems.

There are four structural funds and each of them is assigned to support different field of economy. There are (on the base the data from: http://www.fundusze strukturalne.gov.pl, http://www.efs.gov.pl, http://www.zporr. gov.pl):

1. European Social Fund (ESF) – is the instrument which aim is to co-finance member countries' actions connected with employment policy and human resources development. It is used as a tool of counteracting unemployment. ESF's priorities are implemented in five main fields which point out the scope of projects that can be financed. These are:

• Active labour market policy – its aim is counteracting and preventing unemployment, counteracting long-term unemployment among as well men as women, simplifying reintegration of long-term unemployed with labour market, but also supporting occupational integration of youth and persons returning on labour market after a long absence.

• Counteracting social exclusion phenomenon – to limit social marginalization and prepare persons exposed to social exclusion to enter labour market, hold on employment or return to active professional life. It is aimed in persons who

prior to their difficult life situation can not find themselves on labour market, can not solve their personal, social and professional problems using long-term social help benefits.

• Life long learning – to simplify and making better access to labour market and integration with labour market, increasing and keeping employment potential and promoting mobility and broaden access to trainings, education and consultancy.

• Improving human resources (adapting potential promotion) and enterpreneurship development – reached by promoting qualified, competent and able to adapt to changing conditions in labour market human resources, promoting innovations in the field of work organization, creating conditions fostering new work places creation, human resources development in the field of researches, science and technology.

• Extending access and participation of women on labour market, including the possibility of developping career, increased women access to new work places, help with opening own enterprises, and also actions combating their discrimination at work.

2. European Agricultural Guidance and Guarantee Fund (EAGGF) - contributes to the structural reform of the agriculture sector and to the development of rural areas.The biggest part of the EU's budget is designed for that purpose (about 40%).

3. European Regional Development Funds (ERDF) principal objective is to promote economic and social cohesion within the European Union through the reduction of imbalances between regions or social groups. It contributes to local development, better employment and better function of small and medium enterprises.

4. Financial Instrument for Fisheries Guidance (FIFG) the specific fund for the structural reform of the fisheries sector.

Poland received 7 635.3 mln euro from the EU's budget for years 2004–2006 for four structural funds and 3 733.3 mln for Cohesion Fund. Table 1 shows sums of money reserved for each fund.

T a b l e 1

Sums of money for each structural fund in Poland in years 2004-2006

Fund	Amount (in mln euro)
European Regional Development Funds	4 652.8
European Social Fund	1 748.9
European Agricultural Guidance and Guarantee Fund	1 055.0
Financial Instrument for Fisheries Guidance	178.6
Cohesion Fund	3 733.3
Total	11 368.6

S o u r c e: *National Development Plan 2004–2006.*

Structural funds are divided according to the National Development Plan - document defining goals of the country's social and economic development and the methods of achieving them. Operational programmes are meant to implement it. There are 7 operational programmes in Poland, among them the most important Sectoral Operational Programme Human Resources Development (SPO RZL) and Integrated Regional Operational Programme (ZPORR). The main objective of SPO RZL is development of an open, knowledge-based society through provision of conditions facilitating human resources development by gaining education, undergoing training. The main goal of ZPORR is to create the conditions for the increase of competitiveness of the regions and prevention from the marginalization of some areas, in such a way as to enhance the long term economic development of the country, its economic, social and territorial cohesion, as well as integration with the European Union. Those tasks are implemented with the following Priorities: development and modernisation of the infrastructure to enhance the competitiveness of regions, strengthening the human resources development in regions and local development. The other operational programmes are: SPO Improvement of the Competitiveness of Enterprises, SPO Restructuring and Modernisation of the Food Sector and Rural Development, SPO Sectoral Operational Programme Transport, SPO Fishery and Fish Processing and SOP Technical Assistance.

3. SITUATION ON LABOUR MARKET IN ŚWIĘTOKRZYSKIE VOIVODSHIP

Świętokrzyskie voivodeship's area is 11 691 square kilometers what stands for 3.7% of total area of Poland. It consists of 14 districts and 102 communes (5 urban ones, 25 urban-rural, 72 – rural). More than a half of region's population (54.6%) are people living in the rural areas. There is a constant increase in a number of people in post-productive age and in the same time decrease in a number of people in pre-productive age. A number of people in productive age is also changing because of searching jobs in others regions of Poland but also abroad in others EU's countries.

High level of unemployment has been the main socio-economic problem for świętokrzyskie voivodeship for the long time. Quantity and structure of unemployment before year 2004 was determined especially by situation in districts inhabited by the biggest number of people working in industries being strategic economy branches (especially in northern part of the region). Restructuring processes taking place in those industries caused lay off of many employees, falling of quality of life and increasing of unemployment. Other factors which influenced unemployment rate in years 1999–2002 were (*Human resources...* 2003):

– low rate of economic development, economic stagnation in Poland and in region,

– fastest restructure processes,

– expiration of privatizing contracts with enclosed "social packages",

– decreased rate of new work places creation, especially in small and medium enterprises,

– demographic peak entering labour market,

– not registered employment,

– low flexibility of labour law,

– maladjustment of level and structure of human resources' qualifications to the needs of the local labour market.

Resolving data from Table 2 it is clearly seen that situation on the local labour market is getting better. Rate of unemployment for the end of 2003 in świętokrzyskie voivodeship was 22% while in August 2007 it lowered to 15.2% respectively.

T a b l e 2

Unemployment rate in świętokrzyskie voivodeship in years 2003 – 2007 according to districts

District	2003	2004	2005	2006	August 2007
buski	9.7%	12.4%	12.2%	10.7%	8.5%
jędrzejowski	13.6%	18.2%	18.0%	15.4%	12.6%
kazimierski	9.7%	13.9%	12.8%	12.3%	0.7%
kielecki	21.1%	28.6%	27.2%	23.6%	20.8%
konecki	25.2%	32.1%	30.1%	26.7%	23.2%
Miasto Kielce	15.6%	15.7%	14.4%	11.9%	10.4%
opatowski	14.7%	20.2%	19.6%	18.6%	16.3%
ostrowiecki	26.7%	28.6%	26.5%	22.7%	20.1%
pińczowski	11.9%	15.5%	15.2%	12.1%	9.7%
sandomierski	14.0%	17.0%	16.3%	13.8%	12.2%
skarżyski	28.6%	32.8%	31.5%	28.9%	25.0%
starachowicki	23.3%	27.0%	25.2%	19.8%	16.5%
staszowski	13.7%	17.6%	16.5%	14.9%	11.9%
włoszczowski	19.2%	23.5%	21.7%	18.2%	15.0%
świętokrzyskie voivodeship	22.0%	21.9%	20.6%	17.9%	15.2%
Poland	20.0%	19.1%	17.6%	14.9%	12.0%

S o u r c e: www.wup.kielce.pl.

The reasons for those changes are as well shifts on country level (for example suitable changes of law, incentives for entrepreneurship development, better economic situation of the country, export's increase, more foreign investors opening new work places) but also actions taken in by the local authorities. Inflow of structural funds assigned for socio-economic development of Poland also played an important role. Investments in infrastructure, promoting entrepreneurship and setting up own businesses, investments in lifelong learning or co-financing of new work places had to bring effects such as economic boom, and in the same time an increased in a number of employed persons.

Situation on local labour market is currently influenced by (Analysis and assessment...., 2007):

– differences in regions' socio-economic development and level of advancement on the privatization field and restructure of companies,

– rate of economic grow that together with increasing work efficiency decides about new work places' creation,

– increased country investments and inflow of foreign investors,

– inflow of structural funds,

– quality and quantity of human resources,

– migrations reducing number of qualified workers,

– structural character of unemployment caused by maladjustment of unemployed qualification to the demand.

4. EU'S EMLOYMENT POLICY AND LABOUR MARKET PROCESSES IN ŚWIĘTOKRZYSKIE VOIVODESHIP

Employment policy's strategy in the EU gain its importance in 1999 when Amsterdam Treaty came into force. There was a new title on employment and it was established as the Community's objective and the subject of the "common care".[1] Conception of employment policy means all actions taken to achieve the highest level of employment in member countries. The European Commission based on its guidelines in the field of employment policy on four basic pillars which are:

– ability to get employment – it concerns youth (getting first job after graduating school), and long-term unemployed. Long-term unemployed is a person who is registered in the local labour office together 12 months during the last two years with excluded periods of probation and trainings at work place[2]. It was agreed that all member countries must be capable of helping youth workers to start their

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[1] Amsterdam Treaty, Title VIII, article 125–130.

[2] Act of 20.04.2004 about employment promotion and labour market institutions. Dz.U. 2004, Nr 99, poz. 1001 with changes, article 1 point 2.

first job during first six months after graduating, and all adults during one year. This help can consist of starting learning, trainings, internships, finding job etc.

– entrepreneurship – the pillar of this point is conviction that generating more new jobs needs favorable conditions for business development. Actions taken in that field can be broad: from making setting up new business easier so as to appropriate adaptation of taxation system to the needs of employment.

– Adapting ability – concentrated on employees' adapting skills development, adaptation of employers to changes in technology and markets, restructure and creating new products or services, work organization changes, readiness to organize and taking part in trainings.

– Equality between men and women – the main aim of this pillar is to help implement changes in the European society in direction of fulfilling rules of gender equality at work. The effect of those actions should be bigger vocational activity of women. What is more actions in that field concentrate also on social integration and enhancing vocational activity of disabled persons.

Actions in the field of employment policy and support for human resources development in Poland are implemented according to the National Measure Plan for Employment (according to Act of 20.04.2004 about employment promotion and labour market institutions. Dz.U. year 2004, Nr 99, poz. 1001 with changes, art. 3 ust. 4) and regional measures plans for employment prepared by each voivodeship. Voivodeship Labour Office in Kielce is responsible for implementation of the Świętokrzyski Measure Plan for Employment (ŚMPE). Particular priorities are supposed to be realized by different institutions for example regional labour offices, employment agencies, training institutions. Aims and tasks of ŚMPR are divided into five main priorities:

1. Investing in human resources and increasing access to employment by active labour market policy.

2. Increased quality of labour market services and learning system adequate to the needs of the local labour market.

3. Entrepreneurship development and employment promotion.

4. Adaptation to changes and promotion of adaptation's skills.

5. Socio-vocational elicitation of persons in especially difficult situation on the labour market and combating discrimination.

Projects financed by ESF contribute to the realization of the above measures. Voivodeship Labour Office in Kielce is implementing institution for Measures 1.2 and 1.3 of SPO RZL and Measures 2.1, 2.3 and 2.4 of ZPORR. Table 3 presents figures concerning amounts of money placed for each measure in świętokrzyskie voivodeship.

The crucial role in diminishing unemployment plays projects implemented according to SPO RZL. They are realized by 13 regional labour offices from świętokrzyskie voivodeship region. Their measures are concentrated on young unemployed activation and counteracting and combating long-term unemploy-

ment among others by: trainings for unemployed, subsidies for work places, internships, work mediation, co-financing of setting up business, vocational guidance.

Table 3

ESF's budget for different operational programmes

No.	Operational Programme/Measure	Poland (in mln euro)	Świętokrzyskie voivodeship (in mln euro)
1	Sectoral Operational Programme Human Resources Development (SPO RZL)	1 270.4	137.1
	Measure 1.2 Perspectives for youth	274.4	12.0
	Measure 1.3 Counteracting and combating long-term unemployment	263.8	7.7
2	Integrated Regional Operational Programme (ZPORR)	2 869.5	33.0
	Measure 2.1 Development of competencies linked to the regional Latour market Leeds and life long learning opportunities	130.6	4.1
	Measure 2.3 Vocational reorientation of persons leasing agriculture sector	72.6	1.4
	Measure 2.4 Vocational reorientation of the workforce affected with restructuring processes	98.9	2.3

S o u r c e: IROP Complement, SPO RZL Complement, Measure Realization Plan Framework for 2004–2006 Voivodeship Labour Office in Kielce.

ZPORR's programmes do not have direct influence on unemployment fall. Actions taken in the field of working people vocational skills development are meant to make easier mobility in labour market, gaining new skills and career development. The main goal of projects implemented according to Measure 2.3 ZPORR is helping rural areas inhabitants (farmers, inmates or persons employed in agriculture) in finding job besides agriculture. It is done by conducting many vocational trainings preparing to get job in different profession. All actions mentioned above are important for employment increase, facilitation for youth to start career, qualified human resources development and development of their potential. Since now over 30 000 of working persons, farmers and people have been threatened by loosing jobs getting support from ZPORR programmes.

In the programming period 2004–2006, 35 192 unemployed persons got support from SPO RZL in świętokrzyskie voivodeship. Table 4 shows data concerning number of people who profit from structural funds in each district and sums of money spent on this purpose.

T a b l e 4

Size of financial support for SPO RZL in years 2004–2006 in districts of świętokrzyskie voivodeship (EFS financing in PLN)

District	2004	2005	2006–2007
Buski			
number of ultimate beneficiaries	348	693	1 376
ESF financing	739 025.27	1 262 295.23	2 907 933.99
Jędrzejowski			
number of ultimate beneficiaries	536	743	1 158
ESF financing	801 149.96	1 936 683.36	3 883 140.57
Kazimierski			
number of ultimate beneficiaries	294	388	576
ESF financing	232 018.00	456 310.26	1 062 607.26
Kielecki			
number of ultimate beneficiaries	2 876	4 134	9 680
ESF financing	3 720 836.71	7 713 497.02	21 934 882.02
Konecki			
number of ultimate beneficiaries	1 486	1 539	2 502
ESF financing	1 740 940.59	2 372 356.63	2 372 356.63
Opatowski			
number of ultimate beneficiaries	560	900	1 648
ESF financing	569 717.84	1 473 326.51	3 502 174.19
Ostrowiecki			
number of ultimate beneficiaries	1 900	2 380	4 461
ESF financing	1 591 289.41	3 481 375.01	9 747 793.00
Pińczowski			
number of ultimate beneficiaries	613	456	510
ESF financing	407 551.10	639 494.67	1 559 810.81
Sandomierski			
number of ultimate beneficiaries	481	868	1 421
ESF financing	748 056.00	1 579 696.03	3 712 134.97
Skarżyski			
number of ultimate beneficiaries	1 133	1 585	2 817
ESF financing	1 314 815.46	3 028 301.76	7 877 700.61
Starachowicki			
number of ultimate beneficiaries	1 732	1 747	2 851
ESF financing	1 681 387.24	2 404 166.05	6 420 775.65
Staszowski			
number of ultimate beneficiaries	916	950	1 460
ESF financing	857 040.40	1 620 911.51	4 150 922.76
Włoszczowski			
number of ultimate beneficiaries	606	704	1 009
ESF financing	739 025.27	1 326 035.89	2 955 955.38

S o u r c e: Voivodeship Latour Office in Kielce.

5. ECONOMETRIC ANALYSIS OF RELATIONSHIP BETWEEN FINANCIAL SUPPORT FOR SOP HRD AND UNEMPLOYMENT RATE IN ŚWIĘTOKRZYSKIE VOIVODESHIP

5.1 Model's specification

As it was shown, situation on the local labour market in świętokrzyskie voivodeship is constantly getting better in recent years. One of the most important factors determining those changes is inflow of funds from EU's structural funds. It has been underlined that investments in infrastructure, entrepreneurship promotion and setting up own businesses, investments in lifelong learning or co-financing of new jobs had to bring effects such as economic boom, and in the same time an increased in a number of employed persons. Analysis of graph 1 initially confirms that argument.

Migrations abroad are also an important factor of unemployment rate decrease in many regions but in świętokrzyskie voivodeship it is not on a big scale. According to official statistics 176 persons from świętokrzyskie voivodeship registered abroad in year 2004, 113 in year 2005 and 216 in year 2006. Adequately 114, 128, 904 inhabitants of świętokrzyskie voivodeship checked out. Świętokrzyskie voivodeship has minimal level of mentioned indicators compared to other voivodeships despite of growing migration trend. Emigrants from świętokrzyskie region give only 2% of country's level. That is why those factors have not been mentioned in model's specification showing changes in świetokrzyskie labour market.

The most important determinant of unemployment is economic development measured by GDP. Unfortunately data about GDP are not accumulated on the district's level. Taking it into account two models describing unemployment in świętokrzyskie region have been specified.

$$stbezr = f\,(dot\_percapita), \tag{1}$$

$$bezr = f\,(dotacje), \tag{2}$$

where:
   st_bezr – unemployment rate (%),
   $bezr$ – number of unemployed,
   $dotacje$ – amount of financial support for SOP HRD in districts of świętok-rzyskie voivodeship (in mln PLN),
   $dot\_percapita$ – amount of financial support for SOP HRD in districts of świętokrzyskie voivodeship for 1 inhabitant (in mln PLN).

Introducing zero-one variable u04 to the model, taking values 1 for year 2004 and 0 for others (this variable shows influence of increased migration scale in year 2004), confirms previous observations concerning this factor (this variable is statistically significant).
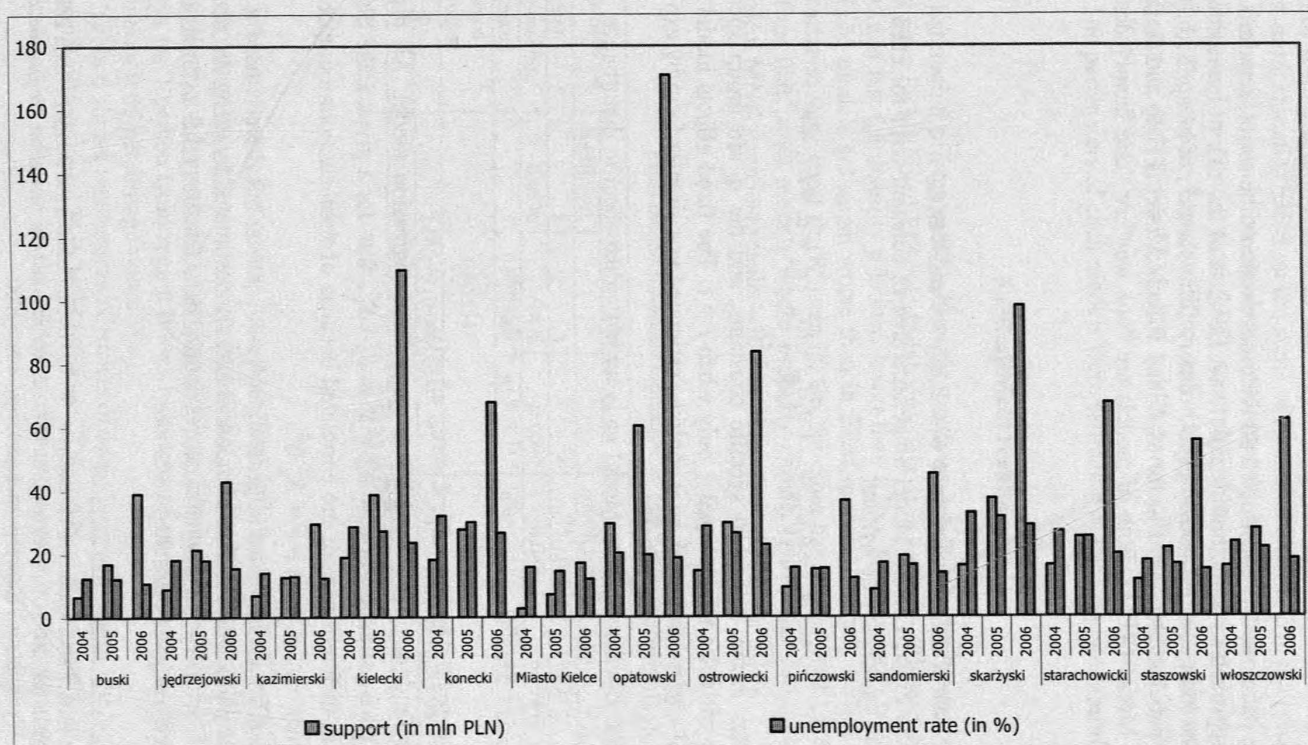
Graph 1. Dynamics of unemployment rate and support for SOP HRD in świetokrzyskie voivodeship in years 2004–2006
S o u r c e: own calculations.

5.2 Methods of parameter estimation

The panel models constructed on the cross-section-time series, require a different approach as in the traditionally way. Because of the risk of heteroscedasticity, the least squares method in its ordinary form should not be applied. Practically, panel models have to forms: Fixed Effects Model (FEM) and Random Effects Model (REM). Both of models are "one way" or "one factor" designs of the form:

$$y_{it} = m_i + bx_{it} + e_{it} \qquad (3)$$

where e_{it} is a classical disturbance with $E(e_{it}) = 0$ and $Var(e_{it}) = S_e^2$.

In the Fixed Effects Model m_i is separated in constant term for each unit. Thus, the model may be written:

$$y_{it} = a_1 d_{1it} + a_2 d_{2it} + ... + a_k d_{kit} + bx_{it} + e_{it} = a_i + bx_{it} + e_{it} \qquad (4)$$

where the a_i are individual specific constants, and the d_i are group specific dummy variables which equal 1 only when $j = i$. The fixed effects model is a classical regression model, so it could be estimated in a simpler form by exploiting the algebra of least squares.

In the Random Effects Model m_i is an individual specific disturbance. The model is

$$y_{it} = a + bx_{it} + e_{it} + u_i \qquad (5)$$

where $E(u_i) = 0$, $Var(u_i) = S_e^2$, $Cov(e_{it}, u_i) = 0$.

The random effects model is a generalized regression model. All disturbances have variance $Var[e_{it} + u_i] = S^2 = S_e^2 + S_u^2$. But, for a given i, the disturbances in different periods are correlated because of their common component, u_i, $Corr(e_{it} + u_i, e_{it} + u_i) = r = S_u^2 / S^2$.

The efficient estimator is generalized least squares, but there is used a two step procedure. The variance components are first estimated by using the residuals from ordinary least squares regressions. Then, feasible GLS estimates are computed using the estimated variances.[3]

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[3] For further information see for example: W. H. Green, *Econometric Analysis*, Sixth Edition, Prentice Hall, NY 2008; B. Suchecki, *Panel Data and Multivariate Models in the Economic Researches*, Wydawnictwo Uniwersytetu Łódzkiego, Łódź 2000.

For testing the models Chi-squared statistics based on the likelihood functions and F statistics based on the sums of squares are used. When p (probability that the statistic would be equaled or exceeded by the chi-squared or F random variable) is low (lower than 0,05) accuracy of using FEM or REM is been proved. The choice between FEM and REM is done by using Hausman test (high values of H favor FEM, low values favor REM) (Hausman 1978, Hausman, Taylor 1981).

The parameters of each models were estimated in the Limdep 7.0.

5.3 Empirical results

Estimation of both models brought satisfying results. In both cases better results gave FEM (Fixed Effects Models) models. It is because of better results of Hausman test (probability p is low, lower than 0.05). What is more coefficients in REM models are much worse than in FEM models. Estimated FEM models characterise very good fit (R^2 near 1). On the other hand F test and LRT results confirm that panel models where properly chosen (parameter estimation with classical MNK gave low results – R^2 was accordingly 0.02 and 0.16).

Table 5

Panel models parameter estimation: st_bezr=f(dot_percapita)

Specification	Fixed Effects Model			Random Effects Model		
	coefficient	t	p	coefficient	t-ratio	p
constant	x	x	x	21.7161	14.521	0.0000
dot_percapita	−0.0516	−6.476	0.0000	−0.0491	−6.194	0.0000
R-squared	0.970724			0.0214467		
Adjusted R-squared	0.95554			x		
LRT (p)	147.390 (0.00000)			25.96 (0.00000)		
F (p)	67.343 (0.00000)			x		
Hausman test	9.27 (0.00233)					

S o u r c e: own calculations.

Estimation results confirm hypothesis that <u>inflow of funds from EU, aimed at combating unemployment according to SPO RZL, has an essential impact on unemployment decrease in świętokrzyskie voivodeship.</u> Each following million zlotys for 1 person from region brings reduction of unemployment rate on average about 0.05 percentage point.

Table 6 shows that between districts of świętokrzyskie voivodeship there are essential differences – high level of t-ratio. This relation is well stressed in those regions where situation on the labour market is the worst – it means konecki and

skarżyski district (one on three professionally active is unemployed). It can be the proof of effective usage of EU's funds for an active labour market policy in świętokrzyskie voivodeship.

Table 6

Values of constant term for świetokrzyskie voivodeships districts

District	Coefficient	t-ratio
Buski	12.8420	15.8689
Jędrzejowski	18.4604	22.6342
Kazimierski	13.8416	17.2454
Kielecki	29.3463	32.3082
Konecki	31.5925	37.2620
Miasto kielce	14.4602	18.1839
Opatowski	23.9514	22.7655
Ostrowiecki	28.1326	32.6450
Pińczowski	15.3159	18.9450
Sandomierski	16.9541	20.7932
Skarżyski	33.6742	37.8997
Starachowicki	25.8721	30.6853
Staszowski	17.8579	21.6123
Włoszczowski	22.9516	27.3126

S o u r c e: own calculations.

Unemployment in absolute measures instead of unemployment rate (explained variable is number of unemployed) was taken into consideration in the second model. Also inflow of funds from EU was taken into account in absolute measures (total amount of subsidies for SOP HRD). It turned out again that better results gave decomposition of residuals than random component (in Hausman test $p < 0.05$).

Table 7

Panel models parameter estimation: bezr = f(dotacje)

Specification	Fixed Effects Model			Random Effects Model		
	coefficient	t	p	coefficient	t-ratio	p
constant	x	x	x	4543.7449	9.522	0.0000
dotacje	−111.3	−4.294	0.0001	−95.1776	−3.709	0.0002
R-squared	0.977113			0.161874		
Adjusted R-squared	0.96525			x		
LRT (p)	151.226 (0.00000)			17.30 (0.00032)		
F (p)	73.981 (0.00000)			x		
Hausman test	19.60 (0.00010)					

S o u r c e: own calculations.

Table 7 shows that inflow of EU's funds limits unemployment – each following million zlotys obtained by Voivodeship Labour Office in Kielce causes that number of unemployed decreases about average 95. It is not many but the impact can be recognized as statistically significant ($p = 0.0002$).

Table 8

Values of constant term for świetokrzyskie voivodeships districts

District	Coefficient	t-ratio
Buski	2113.20374	7.71398
Jędrzejowski	3970.93219	14.33769
Kazimierski	1156.95103	4.26289
Kielecki	11168.20292	28.21880
Konecki	6260.42523	22.07260
Miasto Kielce	7933.67179	28.83318
Opatowski	3013.49923	10.04035
Ostrowiecki	6813.49923	22.70116
Pińczowski	1562.08746	5.74511
Sandomierski	3248.63690	11.77527
Skarżyski	5491.48387	18.88418
Starachowicki	5078.85670	17.79493
Staszowski	3737.34010	13.49410
Włoszczowski	2785.36514	10.14894

S o u r c e: own calculations.

The strongest impact of EU's funds on an unemployed number is in kielecki district and in Kielce itself (see Table 8). Kielce is the biggest city in region and its capital that is why it takes more advantage of structural funds. Situation on labour market is relatively the best in kazimierski, buski and pińczowski district and that is why those districts got the smallest amounts of EU's funds for combating unemployment (in year 2006 it was adequately 1.3%, 2% and 3.7% of an amount allocated in voivodeship). It is the reason of the lowest rate of t-ratio (but it should be underlined that showing statistic significance of differences between districts).

Both models confirm the accuracy of thesis that inflow of funds supporting combating unemployment in świętokrzyskie voivodeship brings measurable effects. It can be supposed that intensification of similar actions in future programming period 2007–2013, together with better economic situation, will bring further unemployment rate limitation in świętokrzyskie voivodeship.

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ROLA FUNDUSZY STRUKTURALNYCH W ZWALCZANIU BEZROBOCIA. STUDIUM LOKALNEGO RYNKU PRACY

Celem autorki jest pokazanie związków zachodzących pomiędzy wykorzystaniem środków finansowych pochodzących z Europejskiego Funduszu Społecznego a poziomem stopy bezrobocia w województwie świętokrzyskim. Szczegółowa analiza dotyczy środków przeznaczonych na walkę z bezrobociem w ramach Sektorowego Programu Operacyjnego – Rozwój Zasobów Ludzkich w latach 2004–2006.

Ponadto przedstawiono podstawowe informacje o funduszach strukturalnych w Polsce, sytuację na rynku pracy w województwie świętokrzyskim, politykę zatrudnienia UE oraz podejmowane w regionie świętokrzyskim działania w zakresie rynku pracy.

Słowa kluczowe: fundusze strukturalne, bezrobocie, polityka zatrudnienia.