## ПРОБЛЕМЫ РЕГИОНАЛЬНОГО РАЗВИТИЯ: ПОЛЬША

# THE DYNAMICS OF POLISH LABOUR MARKET

M. Balcerowicz-Szkutnik, T. Szkutnik

University of Economics in Katowice ul. 1 Maja 50, 40-287 Katowice, Poland

The article presents the results of the analyses concerning the parameters of Polish labour market for the years 1998—2009. A special attention was given to the coefficients of occupational activity, employment rates and the level of both general and long-term unemployment. The analyses were performed separately for the gender of employees and with the consideration of the territorial division, while separating voivodeships with the lowest and the highest rates. It has been observed that the dynamics of changes on Polish labour market is closely associated with the changing age structure of the population and has specific consequences in the sphere of condition of Polish pension scheme and social security system. The conclusions emphasise the fact that the level of coefficients that characterise the Polish labour market is the most unfavourable in marginal age brackets of people that make labour resources. During 2004—2009 have been distinguished from the period of 1998—2003, because at that time the change of parameters that characterise Polish labour market was clearly apparent. It was associated with accession of Poland to the EU.

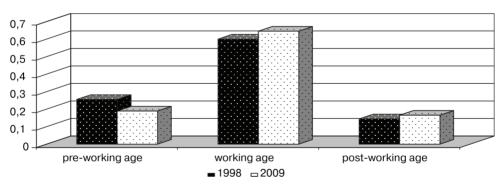
**Key words:** labour market, occupational activity, employment level, unemployment rate, long-term unemployment.

The most convenient way to analyze the changeability and instability of the labour market, which picture the current economic situation of a country, is to use the statistical parameters that characterize this market. However, in order to ensure a proper picture of the situation on a labour market, the detailed analyzes should be carried out with the consideration of age groups in the society. The age categories which are the most "sensitive" to the adverse situation on a labour market are the outermost groups of productive age, i.e., the graduates of secondary schools or higher education schools (for whom there are no works places yet) and the employees at the close of their occupational career who belong to the group called "generation 50+". Particularly, the group of age from 50 to 64 years (generation 50+) constitutes, or it rather should constitute, a subject of a special care for governing elites with regard to its occupational potential and hidden threat for the system of social security. Polish labour market will be

analyzed within the period from 1998 to 2009 in the special point of view, i.e. in the division into provinces, on the basis of Local Data Bank of the Central Statistical Office data base. This will allow for execution of a range of comparative analyses and a more precise diagnosis of the current condition of Polish labour market.

The analysis includes the basic statistical parameters which characterize Polish labour market, i.e., the activity rate, employment index and the measures of both general unemployment as well as with the consideration of time of being unemployed regardless of age of the analyzed people.

Polish labour market — the dynamics of changes in the employment level. The changeable condition of Polish labour market is directly influenced by a changing age structure of the society. In the last decade the proportions between the number of subpopulation of people at the productive age and at the unproductive age have changed. The percentage of people at the productive age has increased, which was the result of the fact that young people born at the time of the second post-war birth peak entered the labor market. However, the internal structure of this subpopulation has changed. While the general subpopulation of people at the productive age (both mobile and immobile (1)) increased by 7,453% in 2009 as compared to year 1998, where the level of increase equalled 8,03% for men and 6,83% for women, the number of mobile age groups showed an unnoticeable decrease by approximately 0,07% (there was an increase by 0,053% for men and a decrease by 0,188% for women). Within the group of people at the immobile activity population the growth was significant and it equalled, in general, 21,44% (22,04% for men and 20,53% for women). The dynamics of changes for economic population groups is presented in figure 1.



**Fig. 1.** Activity and inactivity rate in population, 1998—2009 *Source*: elaboration own.

At the same time, it is visible that in the period from 1998 to 2009 there were also changes in the proportions of subpopulation of people at the unproductive age; i.e., there was a decrease in the share of people at the pre-productive age and an increase of share of people at the post-productive age. This has an important influence on the change of level demographic load for people at the productive age. If we consider the reciprocal loads among groups of people at the pre-productive, productive and post-productive

age (fig. 2) for years 2002 and 2009, the conclusions drawn before are confirmed. One should notice that while the proportions between the number of people at the post-productive and productive age did not change, there were significant changes in the proportions within the group of unproductive people (it means proportions between the numbers of people at the productive age falling on the people at the pre-productive age). The increase in load by approximately 20 percentage points (presented in fig. 2) is a consequence of the changes in basic demographic processes, i.e., a drop of birth level (which is a highly distressing and a negative phenomenon) and at the same time an increase of the coefficient of ageing. In Poland, as compared to other EU countries, the coefficient of ageing remains at the level lower than the average but the tempo of its changes is not optimistic and it may be a source of distress (in combination with downward trend of birth level) for the future of labour market.

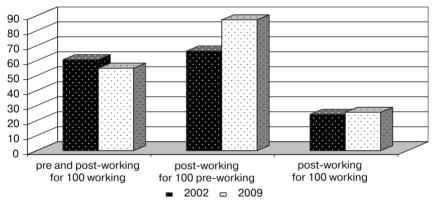
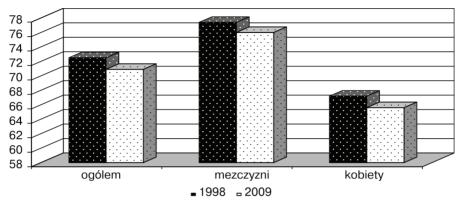


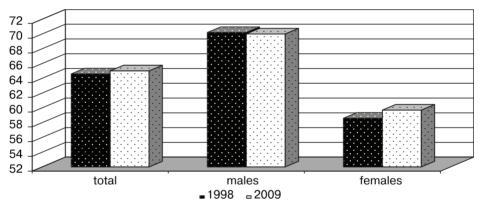
Fig. 2. Dependences between the activity and inactivity population in Poland in years 2002 and 2009

Source: elaboration own.

As it was mentioned before, the indicators that best characterize the condition of labour market are the coefficient of occupational activity and the employment index in juxtaposition with the unemployment level (the so called unemployment rate). The occupational activity measured by means of the percentage of people at the age of 15 years or above who are considered as working or unemployed people within the total number of people in a given age group as well as the employment index that defines the share of actually employed people with reference to labor resources — these are the most suggestive measures picturing the labor market and, at the same time, they are the easiest to interpret. In case of Poland the values of measures for years 1998 and 2009 are shown in figure 3 and figure 4. We can observe a difference in the level of measures for men and women, which confirms the previous observations and a peculiar historical regularity. In case of the coefficient of occupational activity there is decrease in its value in the analyzed period by approximately 2 percentage points. While for men the employment index remains almost unchanged in the analyzed period, for women there is a slight increase, which generates a slight increase of the index for all the employed people. The decrease of coefficient of occupational activity may be justified by a change in age structure of the subpopulation of people at the productive age as well as by the earnings migrations specific at that time and related to the accession of Poland into EU. Stability of the employment index is a reflection of the absorptivity of the labour market and the need to maintain the "gained" work place.

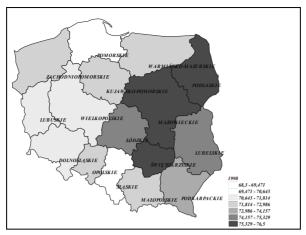


**Fig. 3.** Activity rate (15 to 64 years) for Poland according to gender in years 1998 and 2009 *Source:* elaboration own.

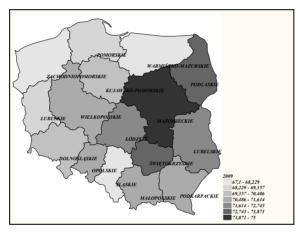


**Fig. 4.** Employment rate to gender within the group of activity population in Poland in years 1998 and 2009 *Source:* elaboration own.

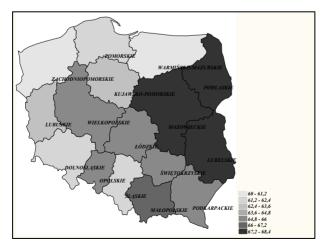
At the same time, attention should be paid to an irregular territorial distribution of coefficients in the scale of the whole country. Both the coefficient of occupational activity and the employment index is a derivative of the economic structure of the region and its density of population. Therefore, we may expect that in traditionally more industrialized provinces or in the provinces with a higher density of population the measures should have higher values. A territorial distribution of the level of occupational activity and employment are shown in figures 5—8, respectively. Each of the measures is analyzed in two outmost years of the analysis, namely years 1998 and 2009. The comparison concerning the location of intensity of occupational activity on labour market will allow for statement regarding its stability.



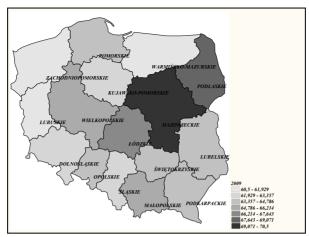
**Fig. 5.** The activity rate in Poland in year 1998 — territorial distribution *Source:* elaboration own.



**Fig. 6.** The activity rate in Poland in year 2009 — territorial distribution *Source:* elaboration own.



**Fig. 7.** Employment rate in Poland in years 1998 — territorial distribution *Source:* elaboration own.



**Fig. 8.** Employment rate in Poland in year 2009 — territorial distribution *Source:* elaboration own

The level of occupational activity and employment should be the highest in greatly industrialized regions which are characterized by a high density of population. These regions include, for instance, Śląskie province. A detailed analysis of the coefficients of occupational activity shows in case of this province extremely low values. A reason for such a situation may be a changeable structure of age within the society and a fact that in regions with a relatively low level of industrialization, frankly agricultural regions, a high value of the coefficient of occupational activity may be influenced by a strong increase of the percentage of people at the productive age (e.g., by more than 6 percentage points in Podlaskie or Podkarpackie province) connected with the entrance onto the labour market of the youth born in the period of early eighties, i.e., at the time of the second post-war birth peak. The comparison of the percentage of population at the productive age confirms these suggestions (fig. 9). A vertical line at the level o 4,51% refers to the average national level of growth of the labour resource potential from year 1998 to year 2009.

It is also important to show, in the scale of Poland, the regions with the highest and the lowest levels of measures of occupational activity and employment. On the basis of above presented figures 5 and 7 (for year 1998) and figures 6 and 8 (for year 2009) we may explicitly conclude that the highest market saturation, both in terms of labor resources and employment, occurred in 1998 in the provinces of central-eastern Poland, i.e., the following provinces: Mazowieckie, Podlaskie, Lubelskie and Świętokrzyskie. However, in year 2009 this region narrowed down to Mazowieckie province. The region with a decidedly lowest level of labor resources and employment is Śląskie province. A low level of employment is certainly related to the changes of the industrial structure of the region, liquidation or a significant limitation of heavy industry units, changes in the forms of management and changes in the system of social insurance. Previous pensions and pre-pension services impoverished the labour market. Simultaneously, "the wave" of earnings migration that appeared at that time changed the picture of the previously industrialized region which had a developed resource of labour force into a region with a low employment potential and a weak (or even the weakest) level of occupational activity.

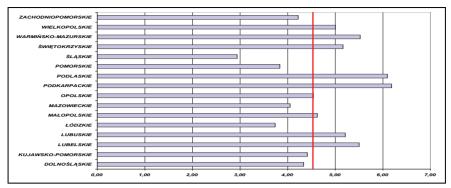


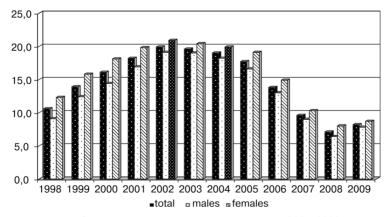
Fig. 9. The Growth of the percentage of people at the productive age (conventionally 17+) in years 1998—2009

Source: elaboration own.

The picture of Polish unemployment. The analysis of unemployment level is a supplement to the statistical analyses concerning the scope of labour market. A further part of the study includes the analyses of the unemployed people registered in the system of Central Statistical Office (3). On the basis of data gathered in the Local Data Bank we will monitor the dynamics of unemployment rate both in general and in a territorial division. A separate analysis will include a case of a long-term (4) unemployment.

The dynamics of changes in the unemployment rate is usually presented in statistical publications in two ways — with reference to the totality of occupationally active people at the age of more than 17 years or with reference to the population at the productive age. The basis for the below considerations is the community of people at the productive age and with regards to this community the groups of people without a job will be analyzed.

When analyzing the changes in the unemployment level in the given period we can distinguish the periods of rapid increase and decrease of the intensity of unemployment. In years 1998—2002 the percentage of the unemployed increased almost twice, both in general case and case of division into the employee's gender (while the dependence, already observed in earlier periods, that the level of unemployment among women exceeds the level of unemployment of men by a few percentage points remains unchanged). Figure 10 presents the dynamics of unemployment rate as divided into the employee's gender.

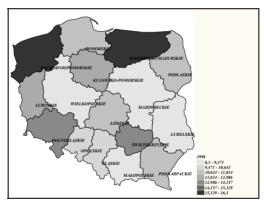


**Fig. 10.** Unemployment rate in Poland in years 1998—2009 with consideration of the employee's gender.

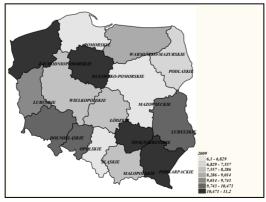
Source: elaboration own.

After year 2003, when the unemployment rate decreased slightly as compared to year 2002, in the course of the following five years a rapid decrease of unemployment to the level lower than in year 1998 was observed. In the last period, i.e., in year 2009, the index increased slightly but the tempo of changes was slight and the measure still remains at the level slightly lower than in year 1998, adopted as the basis year. The experts look for the reasons for the increase and later decrease of unemployment level in the change of the management system, in structural changes of economy and changes concerning the principles of social security and social insurance. The fact that Poland joined the European Union and the opening, at least partial, of the union labour markets is also very important.

When analyzing the phenomenon of unemployment in a more detailed way we should additionally consider the age of people who are without a job. As it was suggested before, the more unstable labour market exists for outmost age groups, i.e., the youngest employees, usually the graduates of secondary or higher education schools, and for the oldest employees, when the structural changes in the economy enforce the change of the type of job and the habits or routine of the employee is in contradiction with such changes. Currently, the subject of the analysis will include the problem of a territorial differentiation of the unemployment level. The following graphs (fig. 11—12) present the intensity of the unemployment rate in individual provinces in Poland in years 1998 and 2009.



**Fig. 11.** Unemployment rate in Poland according to provinces in year 1998 *Source:* elaboration own.

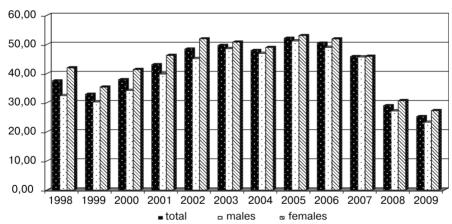


**Fig. 12.** Unemployment rate in Poland according to provinces in year 2009 *Source:* elaboration own.

The maps presented above allow for the statement that in each of the distinguished years Zachodniopomorskie and Warmińsko-Mazurskie provinces were the most influenced by the problem of unemployment. In year 2009 these two provinces were joined by the following provinces: Kujawsko-Pomorskie, Podkarpackie and Świętokrzyskie. The unemployment indices in year 2009 were lower than in previous years but the phenomenon of the extension of unemployment regions can be regarded as alarming because it is equivalent to the extension of the area of the social poverty. Separate research concerning the social well-being point to these regions of the country as the regions of the so called "Polish poverty". It turns out that no governmental actions which aim at prevention of unemployment are effective and temporary decreases of the indices of unemployment level do not improve the problem of the society impoverishment.

Long-term unemployment. As it was mentioned before, a separate problem concerning the considerations related to unemployment is the long-term unemployment, i.e. a situation when an employee is vainly looking for a job within the period of more than one year. The scale of long-term unemployment is studied on the basis of the long-term unemployment rate, i.e., the percentage of the unemployed people looking for a job for more than 12 months. Similarly as in case of general unemployment, the level of long-term unemployment will be monitored on the basis of the indices for whole Poland with the division into the employee's gender and from the territorial point of view for the selected years.

The following figure 13 presents the dynamics of the percentage of permanently unemployed people (the time of being without a job longer than 12 months) with relation to the all working people within the period from 1998 to 2009.

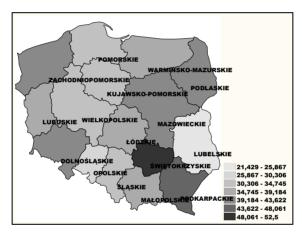


**Fig. 13.** The long-term unemployed in percentage of total unemployed, in Poland 1998—2009 *Source:* elaboration own.

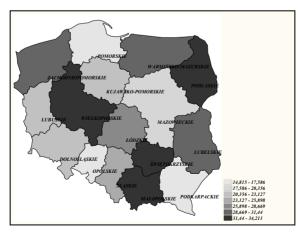
We can observe, that in the total group of the unemployed the percentage of unemployed people without a job for more than one year is considerable and, in the best case, it equals approximately 25% and in the worst case more than 50%, which means that more than a half of unemployed people (and registered in relevant offices) were without a job for more than one year. Such a situation existed in years 2003—2007. This is an alarming phenomenon because, as it was observed before, unemployment

becomes a way for a living and a fact of adopting an occupational passivity and holding the country responsible for the providing for a people themselves and often their families constitutes a burden for the remaining group of employees. In the last two years, in year 2008 and 2009, the percentage of the long-term unemployed within the total group of unemployed people decreases but it is not certain if this is the merit of the change in economic system or a sign of social resourcefulness and a proverbial "taking things in somebody's own hands", or simply the element of demographic dynamics and retirement of the employees. Unfortunately, in the available statistical sources the age of the employee at the time of working is clearly stated and, therefore, the status of employment at the time retirement cannot be explicitly settled, which is a direct reason for the decrease in the percentage of the long-term unemployed.

Considering the territorial distribution of the long-term unemployed we conclude that the intensity of the index differs slightly from the general level of unemployment in terms of a territorial location (figures 14, 15).



**Fig. 14.** The long-term unemployed as a percentage of total unemployed in year 1998 *Source:* elaboration own.



**Fig. 15.** The long-term unemployed as a percentage of total unemployed in year 2009 *Source:* elaboration own.

In year 1998 the regions with the highest level of long-term unemployment were Świętokrzyskie province and Podkarpackie provinces and, to a smaller degree, the following provinces: Mazowieckie, Dolnoślaskie and Podlaskie. In year 2002 a territorial structure concerning the long-term unemployment changed and the provinces with the highest percentage of unemployed people without a job for more than one year were the following provinces: Podkarpackie, Łódzkie and Śląskie (however, it should be reminded that in years 2002—2007 the percentage of long-term unemployed people within the total number of the unemployed increased almost twice in comparison with year 1998). Year 2009, when the index decreased, is a year with the next changes and at that time the highest percentage of people without a job for more than one year was observed in the following provinces: Świętokrzyskie, Małopolskie, Wielkopolskie and Podlaskie. As observed above, the dynamics of indices is considerable it is highly difficult to indicate explicitly the reasons for such changes. It is alarming that the phenomenon of long-term unemployment is, in principle, avoidance of work and, in a wider dimension it may have a pathological character. In such a case the actions aimed at limitation of unemployment are not too effective and, in spite of engaging a wide resource of means and bearing huge costs by governmental entities, they will not bring the expected results.

Conclusion. The purpose of this study was to focus on the pretty significant problem of an economic and social meaning, namely an adverse direction of changes in the coefficients that characterize the labour market. This adverse direction of changes includes a downward trend of the coefficients of occupational activity and employment indices, and an upward trend of the level of unemployment rate. The presented directions of changes are typical not only for Polish labour market. Similar problems are also visible in the scale of other European countries. Therefore, there is a need to work out a common programme which will be possible to use by most EU countries and which aims at the occupational activation especially of people at the age 50+. A separate problem is posed by unemployment, and particularly the long-term unemployment. This is a serious social problem. Being unemployed for a long time activates the process of destruction expressed in social isolation, lack of trust towards oneself, stress within a family, lower intellectual and spiritual form, faint degree of occupational activity. This is a serious problem both from the social and economic point of view. People who are unemployed for a long time have smaller chances to find a job due to three issues: their qualifications decrease, abilities and experience are slowly de-actualized, their optimistic and enthusiastic approach towards looking for a job decreases. Being without a job for a long time leads to a social pathology and pathology combating belongs to the most difficult and most expensive methods of controlling the adverse results of unemployment. One of the forms of preventing the adverse trends on the labour market was to be execution of Lisbon Strategy provisions. However, at this moment is certain that they will not be fully fulfilled at the expected time and the time horizon defined for their full execution should be extended, nobody knows for how long. Even though the particular EU countries that accept the Lisbon Strategy provisions offer the date of their final execution, however, it is not sure if the social conditions will allow for their fulfilment.

#### **NOTES**

- (1) Mobile productive age means 20—44 years for men and women; immobile productive age means 45—64 years for men and 45—59 for women.
- (2) Due to the availability of data the analyses will include only registered unemployment.
- (3) Other, more detailed types of unemployment such as fictitious, frictional, structural, generational, natural, compulsory, seasonal or structural-pathological unemployment are omitted. The only factor considered in the analyses of unemployment will be the time of remaining without job, i.e., long-term unemployment.
- (4) Unemployment rate is the percentage of people without a Job within the population of occupationally active people, i.e., the ratio of number of unemployed people to the number of occupationally active people expressed in percents.

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### ДИНАМИКА РЫНКА ТРУДА ПОЛЬШИ

М. Бальцерович-Шкутник, Т. Шкутник

Экономический Университет в Катовицах ул. 1 Мая 50, 40-287 Катовице, Польша

В статье представлены результаты исследований функционирования польского рынка труда на 1998—2009 гг. Особое внимание было уделено факторам профессиональной деятельности, показателям занятости и безработицы, уровня как общего, так и в долгосрочного. Анализ проводится отдельно для мужщин и женщин с учетом территориального деления с отдельной провинции с самым низким и самым высоким уровнем. Динамика изменений на польском рынке труда связана с изменением возрастной структуры общества и имеет последствия для польской пенсионной системы и системы социального обеспечения. Уровень коэффициентов, характеризующих польский рынок труда, является самым негативным в крайних возрастных группах, представляющих трудовые ресурсы. Развитие рынка труда в 2004—2009 резко различалось от периода 1998—2003 в связи с присоединением Польши к ЕС.

Ключевые слова: рынок труда, безработица, уровень занятости, уровень безработицы.