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# UNEMPLOYMENT AND LABOUR MARKET POLICIES – EMPIRICAL ANALYSIS FOR POLAND

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Key words: unemployment in Poland, active labour market policies evaluation, propensity score matching.

### Abstract

This article presents the development of unemployment and labour market policies in Poland in the period 2005–2015. The paper focuses on the nature and structure of unemployment, expenditure from the Labour Fund, active labour market policy instruments and participants. Active labour market policy evaluation was performed quasi–experimentally and was based on a propensity score matching method. The effects of the policies were evaluated based on information concerning the unemployed taken from the Syriusz database.

### BEZROBOCIE I POLITYKA RYNKU PRACY – ANALIZA EMPIRYCZNA DLA POLSKI

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Sł o w a k l u c z o w e: bezrobocie w Polsce, ewaluacja aktywnej polityki rynku pracy, score matching.

#### Abstrakt

W artykule przedstawiono stan bezrobocia i politykę rynku pracy w Polsce w latach 2005–2015. Rozważania skoncentrowano na przyczynach i strukturze bezrobocia, wydatkach z Funduszu Pracy oraz aktywnych instrumentach polityki rynku pracy i ich uczestnikach. Aktywną ewaluację programów zatrudnienia wykonano, wykorzystując podejście quasi-eksperymentalne i metodę score matching. Źródłem informacji o bezrobotnych do oceny efektów polityki rynku pracy były dane zawarte w systemie informatycznym publicznych służb zatrudnienia Syriusz.

### Introduction

The Polish economy stands presently at a crossroads. There is a long way to go to close the gap in per capita income when compared to the most developed OECD countries. After being the EU's best performing economy, in the initial years following the outbreak of the global economic crisis, the Polish economy has begun to slow, which is having an increasingly negative effect on the labour market and living standards. Many socio-economic indicators have worsened, particularly in the labour market, which shows that the benefits of the country's economic growth have not been felt evenly throughout society. In this situation, government intervention in the labour market plays a very important role (WIŚNIEWSKI, ZAWADZKI 2010).

The aim of this article is to analyse the unemployment development in Poland in the period 2005–2015 and empirically evaluate the labour market policies. The causal effects of labour market policies will be examined based on a propensity score matching method.

Compared to the highly developed European countries, Poland has few methodological achievements in the field of the research issues discussed. Taking into account the available subject literature and examples of practical applications, it can be stated that in Poland research on the causal effects of labour market policies is in its infancy. After an intensive development of the research on the effectiveness of the Polish labour market policies, initiated in the 90s and undertaken by foreign research teams, the first decade of the twenty-first century saw stagnation. Apart from a few and fragmentary evaluation studies of programmes co-financed with EU funds, there were only two major pieces of research conducted which undertook the problem of estimating the impact of basic active labour market policies (assessment of the net effect) offered by the public employment services on the employment situation of programme beneficiaries. It should be noted that a key hindrance to the development of research on this issue in Poland is the lack of appropriate high quality data concerning individual unemployed persons. This data should be collected in a central database that integrates information about these people from different areas of the social services; for instance, from labour office records, social insurance companies, nursing houses or from health care institutions.

# The situation in the labour market in Poland in the period 2005–2015

Poland's joining the European Union has opened new job markets for Polish people in many countries of the Community and has led to reducing the size of unemployment in Poland. In 2004 the number of unemployed persons reached 2,999,600 and in 2008 it decreased to 1,473,752 persons, and the unemployment rate fell by almost 10 percentage points and reached the level of 9.5%. Unfortunately, due to the economic crisis which began in the United States in 2007 and reached Europe in 2008; the number of unemployed started to rise again. Poland's GDP rose on average by 3.7% between 2008 and 2011, with growth slowing to just 1.6% in 2009. At the end of 2009, the number of unemployed persons reached 1,892,680 with an 11.9% unemployment rate and four years later the number of unemployed stood at 2,157,883 and the unemployment rate grew to 13.4%. At the end of 2015, the number of unemployed decreased to 1,563,339 persons and the unemployment rate fell to 9.8%.

Table 1 The number of registered unemployed persons and those seeking employment in Poland in the years 2005-2015

| Years | Registered unemployed persons    | Unemployment rate | Job seekers |  |  |  |
|-------|----------------------------------|-------------------|-------------|--|--|--|
|       | as at the end of the time period |                   |             |  |  |  |
| 2005  | 2,773,000                        | 17.6              | 62,107      |  |  |  |
| 2006  | 2,309,410                        | 14.8              | 56,768      |  |  |  |
| 2007  | 1,746,573                        | 11.2              | 49,360      |  |  |  |
| 2008  | 1,473,752                        | 9.5               | 44,409      |  |  |  |
| 2009  | 1,892,680                        | 11.9              | 46,176      |  |  |  |
| 2010  | 1,954,706                        | 12.3              | 45,506      |  |  |  |
| 2011  | 1,982,676                        | 12.5              | 39,701      |  |  |  |
| 2012  | 2,136,815                        | 13.4              | 40,748      |  |  |  |
| 2013  | 2,157,883                        | 13.4              | 41,395      |  |  |  |
| 2014  | 1,825,180                        | 11.4              | 37,204      |  |  |  |
| 2015  | 1,563,339                        | 9.8               | 33,909      |  |  |  |

Source: Ministry for Labour and Social Policy, Labour market statistics.

In the years 2005–2015, the labour market was characterised as having significant liquidity. The inflow of unemployed persons had been decreasing prior to 2008 when it reached the level of 2,476,000, but in 2009 it grew by over 600 thousand persons and stayed at a similar level in 2010. However, a slight downward trend was then observed. The year 2011 marked a quick deepening of this trend and the size of the inflow fell to 2,591,000 persons. However, the largest outflow from unemployment occurred in 2006 and it amounted to 3,156,000 persons. In subsequent years it was decreasing and in 2009 it reached the level of 2,664,800 persons. The situation improved in 2010 – the

outflow rose by over 300,000 persons to deteriorate again in the following year when the outflow decreased by over 400,000 unemployed persons and reached the level of 2,563,500. Undertaking employment had the largest contribution to the outflow from unemployment; however, its share was falling systematically from 45.2% in 2005 to 38.0% in 2009. In 2010 it increased slightly to 39.7% and in 2011 it grew again to 44.1%.

Also, the share of the subsidised employment in the unemployed persons undertaking employment had been on the increase until the year 2010 and had grown from 13.7% to 21.7%. In 2011, due to a significant decrease in the level of expenditures on active labour market programmes from the Labour Fund, the share fell to 9.8%. However, relatively stable was the share of deregistration from the population of unemployed persons resulting from their failure to confirm their readiness to undertake employment; it stood at 30–33%. In the time period 2005–2008, the outflow from unemployment exceeded the inflow (the largest difference was noted in 2007 – over 560,000 persons), which resulted in a decrease in the unemployment level. In the subsequent years 2009–2013, the situation was the reverse – the inflow exceeded the outflow, which contributed to the growth in the unemployment level. Since the year 2014 the situation has changed – the outflow has exceeded the inflow.

|       |  |   | Out of which for the following reasons: |                                  |  |  |
|-------|--|---|---|----------------------------------|--|--|
| Years | Registered<br>unemployed<br>persons 'inflow' | Deregistered<br>unemployed<br>persons 'outflow' | undertaking<br>employment               | out of which:<br>subsidised work | non-confirmation<br>of readiness<br>to undertake<br>employment |  |
|       | in the reported time period                  |   |   |                                  |  |  |
| 2005  | 2,793,181                                    | 3,019,782                                       | 1,365,790                               | 186,693                          | 993,124  |  |
| 2006  | 2,692,351                                    | 3,155,941                                       | 1,412,799                               | 163,019                          | 972,176  |  |
| 2007  | 2,491,242                                    | 3,054,079                                       | 1,266,439                               | 185,766                          | 949,210  |  |
| 2008  | 2,476,583                                    | 2,749,404                                       | 1,052,077                               | 186,659                          | 874,934  |  |
| 2009  | 3,083,757                                    | 2,664,829                                       | 1,012,375                               | 202,329                          | 837,751  |  |
| 2010  | 3,041,964                                    | 2,979,835                                       | 1,183,296                               | 256,343                          | 874,100  |  |
| 2011  | 2,591,458                                    | 2,563,488                                       | 1,130,697                               | 110,844                          | 827,765  |  |
| 2012  | 2,654,974                                    | 2,500,835                                       | 1,096,364                               | 139,248                          | 741,056  |  |
| 2013  | 2,709,444                                    | 2,688,164                                       | 1,262,865                               | 149,712                          | 726,234  |  |
| 2014  | 2,452,845                                    | 2,786,200                                       | 1,285,777                               | 163,416                          | 738,152  |  |
| 2015  | 2,368,755                                    | 2,630,596                                       | 1,283,943                               | 191,008                          | 585,768  |  |

Source: Ministry for Labour and Social Policy, Labour market statistics.

## **Expenditures from the Labour Fund**

The system of income support of unemployed persons introduced in Poland is based on quasi-insurance principles. Polish law allows for the application of both active and passive measures for counteracting unemployment. The unemployment benefits and labour market policies are financed through the Labour Fund. Its returns come from compulsory payroll contributions paid by employers and from the state budget transfers. The fund is very modest and is limited to dealing with high unemployment.

The act on employment protection and labour market institutions, which became effective on the day when Poland joined the European Union, laid emphasis on active forms of unemployment prevention. It was possible due to the change implemented in September 2004 which shifted pre-retirement benefits and allowances from the Labour Fund to ZUS (The Social Insurance Company). These changes were accompanied by an economic upswing and, therefore, by increased payments made to the Labour Fund which, in the period preceding 2010, led to covering an increasing number of unemployed persons with active instruments of labour market policies. In 2005, the number of unemployed persons involved in active forms of unemployment prevention was 561,700 but in 2007 it rose to 672,800 and in 2010 to 788,000. In the year 2012, the number of unemployed who completed active programmes in the labour market halved and amounted to 382,300. However, an improvement was noted in the employment effects of those undertakings.

 ${\bf Table~3} \\ {\bf Expenditures~from~the~Labour~Fund~in~Poland~in~the~years~2005–2015~(in~millions~of~PLN)}$ 

| Years | Total<br>expenditure | Allowances and benefits | Active labour market programmes | Other |
|-------|----------------------|-------------------------|---------------------------------|-------|
| 2005  | 5,551                | 2,998                   | 2,052                           | 456   |
| 2006  | 5,500                | 2,805                   | 2,219                           | 467   |
| 2007  | 5,367                | 2,268                   | 2,710                           | 390   |
| 2008  | 5,753                | 1,911                   | 3,362                           | 480   |
| 2009  | 11,245               | 4,504                   | 6,205                           | 536   |
| 2010  | 12,376               | 5,014                   | 6,745                           | 617   |
| 2011  | 8,751                | 4,796                   | 3,328                           | 628   |
| 2012  | 11,093               | 3,881                   | 6,844                           | 368   |
| 2013  | 12,130               | 3,891                   | 7,817                           | 422   |
| 2014  | 12,125               | 3,205                   | 8,515                           | 405   |
| 2015  | 10,931               | 5,110                   | 5,294                           | 527   |

Source: data taken from the Ministry for Labour and Social Policy.

In 2009, 47.9% of the unemployed covered by employment programmes became employed. However, in 2007 this index was higher by almost 10 percentage points (57.7%), but it fell in 2010 to 54.2% and in the following year rose to 55.7%.

Expenditures from the Labour Fund, which were destined to smooth the effects of unemployment and to fight this phenomenon, maintained a similar level throughout 2005-2008 and fluctuated between 5.4 billion and 5.8 billion PLN; however, in 2009 alone they doubled and reached the level of 11.2 billion PLN. In 2010, the rate of increase in expenditures from the Labour Fund was relatively small – the expenditures rose by about 10% reaching 12.4 billion PLN. The year 2011 saw a decrease in expenditures of almost 30% to the level of 8.8 billion PLN. Aso, the structure of the expenditures changed. Prior to the year 2008, the share of the expenditures on allowances and benefits had fallen from 54.0% to 33.2%. In subsequent years, there was growth and in 2011 a level of 54.8% was reached (this was partially due to the inclusion of the payment of preretirement allowances and benefits previously realised by the Social Insurance Company to the Labour Fund). The share of the expenditures on unemployment prevention programmes increased from 37.0% in 2005 to 54.5% in 2010. However, in 2011 it decreased to 38.0% and, in particular, a dramatic fall was noted in the expenditures on active labour market policies. In 2011 they were reduced by 64.0% from the previous year and their share in the total expenditure of the Labour Fund fell from 43.0% in 2010 to 21.9% in 2011 and reached the lowest level of the past decade. In the period 2012-2015, total expenditure from the Labour Fund increased to the level about 11-12 billion PLN. In 2015, one can observe a significant decrease in spending on active labour market policies which is accompanied by a simultaneous increase in expenditures on unemployment benefits.

## Active labour market policy measures and participants

In Poland in 2004 by virtue of the act on employment promotion and labour market institutions (2004) a new division of active labour market policies was introduced into labour market services and labour market instruments. The act specified the following four fundamental types of labour market services: job placement, vocational counselling and information, active job search assistance and organisation of training courses.

The following constitute labour market instruments supporting labour market policies: financing the cost of travel to the employer that submits the job offer, financing the cost of accommodation in the work place paid by a person who was sent by a district job centre to undertake employment, co-financing of the furnishing of a work place, of commencing a business activity, of the costs of consultations and counselling, reimbursing the costs borne for social insurance contributions paid related to the employment of an unemployed person and financing unemployment prevention additional allowances.

In order to prepare and encourage unemployed persons, the following instruments have been defined within the labour market policies in Poland: training courses, intervention works, public works, vocational training at the work place, placements, start-up incentives and other means for creating work places, as well as small public works. These instruments impact the supply and demand sides of the labour market. The supply-oriented instruments include training courses, placements, and vocational training at the work place which, since the year 2009, has had the form of adult vocational training. The demand-oriented instruments, in turn, include subsidised employment which takes the following forms: intervention works, public works, small public works, means for adults' engaging in a business activity and for the furnishing of a work place for an unemployed person assigned by a district job centre.

Vocational training is an instrument for preparing the unemployed and those seeking employment and is applied in the following situations: lack of vocational qualifications, the need to change or complete vocational qualifications, loss of ability to conduct work in the position occupied hitherto, or lack of abilities to seek employment actively. Means for training from the Labour Fund may also be allocated to employed persons over 45 years of age who are interested in their professional development. In accordance with the act, training courses may last up to 6 months; however, in the cases justified by the training programme developed for a specific occupation, the duration of the training may be extended to 12 months. Training services are delivered in the following two modes: group and individual. As regards the former, a job centre may propose an eligible person to participate in training included in the annual training scheme; within the latter mode, an individual may be directed to a training course selected by himself/herself, providing that participation in it is justified. The unemployed covered by training services are entitled to the following forms of financial support:

- a scholarship equal to 120% of the unemployment benefit;
- refund of travel, accommodation, and food costs incurred due to the participation in training;
- refund of child care or of dependent care, up to 50% of the unemployment benefit.

Placements are organised on an employer's premises and are intended to enable unemployed persons to gain experience and acquire skills indispensable to undertake employment. This is especially important for graduates, who naturally lack work experience. At present, however, placements are assigned to all unemployed persons whose situation in the labour market is special. Depending on the category of persons whose situation in the labour market is special, the length of vocational training has been differentiated but the maximum duration should not exceed 12 months. Placements are regulated by contracts concluded between the district governor and the employer and follow the programme agreed upon. The programme should take into account the unemployed person's psycho-physical predispositions, health condition, the level of education, and the vocational qualifications acquired hitherto. Also, it should specify the scope of the tasks to be realised both by the unemployed person and by the person in charge of the person covered by the programme of placement. Within the duration of the vocational training, the unemployed person is eligible for a scholarship equal to 120% of the unemployment benefit. The employer is not obliged to guarantee employment to the intern after the placement is finished.

The purpose of adult vocational preparation is to increase an adults' participation in continuing education corresponding to employers' requirements. All unemployed persons are eligible for this programme. Adult vocational preparation may take the following two forms:

- learning a job at the practical level,
- training for a job.

Learning a job at the practical level usually lasts from 12 to 18 months and concludes with a qualification examination granting a vocational title, or with an examination qualifying for a journeyman. Training for a job, in turn, lasts from 3 to 6 months and also concludes with an examination checking whether candidates possess specific skills. Adult vocational preparation follows an established programme which considers the vocational qualification standards and both theoretical knowledge and practical skills. Mention must be made that acquiring practical skills must cover a minimum of 80% of the time of vocational preparation and must be conducted on the employer's premises. The employer is obliged to assign a person with the qualifications required to supervise adult vocational preparation.

Refunds of costs incurred by employers for creating work places for assigned unemployed persons within the adult vocational preparation programme functions as an incentive to employers. The amount of those refunds should not exceed 2% of the average remuneration paid out for each month of the vocational training. Another incentive to employers is a bonus to be paid out in the amount of 400 PLN; similarly, for each month of the vocational training, providing the unemployed person passes the final examination. The cost of the examination is also reimbursed from the Labour Fund.

The purpose of organising public works is to prevent unemployed persons from becoming accustomed to economic inactivity, in particular, in unfavourable and very unfavourable situations in the labour market, through temporary employment. These programmes are also intended to support the unemployed materially. Public works denote employing an unemployed person for the period of time up to 12 months in the case where works are organised by communes or non-governmental organisations which statutorily deal with the following issues: protection of the environment, culture, education, physical education, tourism, health care, unemployment, and social welfare. The organiser of public works is entitled to receive for the period of 6 months the reimbursement of part of the cost of remuneration, bonuses, and social insurance contributions. In the case where the employment period exceeds 12 months, the cost borne by the employer is refunded for every second month.

Intervention works are aimed at vocational activation of the unemployed whose situation in the labour market is special and at creating opportunities for undertaking permanent employment. Intervention works programmes help those groups which are exposed to the threat of being vocationally withdrawn and unprepared to maintain contact with the labour market. Intervention works consist in employing an unemployed person pursuant to a contract concluded between the district governor and the employer. The employer that offers a work place to the unemployed person assigned for intervention works may receive a reimbursement of a part of the cost borne for the payment of the remuneration agreed upon in the contract, bonuses and social insurance contributions corresponding to the reimbursed remuneration. The duration of the programme may vary. The basic period of providing aid for the aforementioned groups lasts up to 6 months (or up to 12 months in the case where the reimbursement is paid out for every second month of the employment period). For some categories of the unemployed intervention works may last up to 12 or even up to 24 months (or up to 18 and 48 months in the case where the reimbursement is paid out for every second month of the employment period).

Small public works are primarily aimed at the realisation of social purposes and are targeted to the unemployed who are not eligible for an unemployment benefit and are recipients of social benefits. These instruments are to prevent demoralisation and teach persons threatened by social exclusion how to work. Small public works may last up to 10 hours per week. These works are realised based on a contract concluded between the district governor and the commune for the benefit of whom the public works are going to be conducted. The unemployed person assigned to them is entitled to receive an hourly rate of a minimum of 7.70 PLN for every effective working hour.

The means allocated to the creation of new work places cover the following: a one-off subsidy paid out to the unemployed person to commence business activity, refunds paid out to the employer, and the cost of furnishing or providing additional equipment for a work-stand in return for employing the assigned unemployed person. They are aimed at supporting self-employment and the development of regional small businesses. At present, the amount of means granted to an unemployed person for commencing business activities or providing additional equipment for a work-stand cannot exceed 600% of the average remuneration earned in Poland. In addition, an unemployed person may receive a reimbursement of the documented cost of legal assistance, consultations or counselling. The unemployed person who received the support is obliged to continue the business activity for a period of 12 months under pain of returning the subsidy. The employer representing the small or medium-sized enterprise is obliged to maintain the work place for a period of 2 years.

The number of unemployed engaged in active labour market policies rose in the time period 2005–2010 by approximately 40% and the number of unemployed persons in that period fell by 35%. Therefore, the number of unemployed who were engaged in active labour market policies increased significantly. However, 2011 saw a decline in the number of unemployed by 1.4%. The number of persons engaged in active programmes decreased substantially

Table 4
Number of unemployed persons engaged in main labour market programmes in Poland
in the years 2005–2015 (in thousands)

| Years | Total | Training | Intervention<br>works | Public<br>works | Placements | Start-up | Furnishing<br>and providing<br>additional<br>equipment to a<br>work-stand |
|-------|-------|----------|-----------------------|-----------------|------------|----------|---|
| 2005  | 561.7 | 150.7    | 70.9                  | 69.2            | 162.7      | 27.9     | 13.1  |
| 2006  | 594.3 | 146.9    | 69.1                  | 32.7            | 169.1      | 34.9     | 21.8  |
| 2007  | 672.8 | 178.1    | 59.1                  | 40.9            | 173.0      | 45.1     | 37.4  |
| 2008  | 652.3 | 168.3    | 46.0                  | 44.5            | 169.9      | 52.2     | 28.0  |
| 2009  | 684.6 | 168.3    | 40.3                  | 54.0            | 256.7      | 63.9     | 28.4  |
| 2010  | 788.7 | 182.4    | 43.2                  | 74.6            | 299.3      | 77.0     | 44.6  |
| 2011  | 302.0 | 53.8     | 28.5                  | 22.8            | 110.5      | 26.1     | 10.7  |
| 2012  | 428.3 | 80.6     | 31.8                  | 30.4            | 176.7      | 39.4     | 22.5  |
| 2013  | 414.3 | 84.9     | 33.9                  | 32.5            | 194.1      | 45.1     | 23.6  |
| 2014  | 442.2 | 78.5     | 31.1                  | 32.6            | 219.7      | 50.0     | 30.2  |
| 2015  | 484.3 | 74.8     | 53.2                  | 35.6            | 240.4      | 47.3     | 33.0  |

Source: materials published by the Ministry for Labour and Social Policy.

(by more than 46%) and the programmes covered merely 15% of the total number of unemployed in Poland.

The largest expansion in undertaking business activities and creating new work places was noted in the years 2005-2010 when the number of unemployed engaged in these programmes increased by more than 300%. The number of unemployed participating in placements rose by almost 84% and of those participating in training courses by almost 21%. However, a fall was noted in the number of unemployed persons engaged in intervention works (by 39%). The decrease in the proportion of intervention works was related to the rigorous legal requirements on the employment of an unemployed person after the completion of intervention works. Placements were regulated by less rigorous regulations and after the amendments made in the act at the end of 2008, when the subject scope was extended, it became more favourable. The year 2011 saw a decrease in the number of persons involved in all of the active programmes. The quickest fall in the number of participants was noted in training courses, public works and in supporting business activities. The fall was due to the poor situation of public finances and the drastic cuts in the means allocated to the activation of the unemployed.

In the time period 2012–2015, the tendency has changed and the number of unemployed engaged in active labour market policies has risen and has reached 484.3 thousand. At the end of this period, active labour market programmes covered 31% of the total number of the unemployed.

In 2015, placements had the largest share in the structure of the unemployed engaged in active labour market programmes (49.6%). Training programmes came second; however, their share was on the decrease – it dropped from 26.8% in 2005 to 15.4% in 2015. The share of intervention works was in third place – 11%. In fourth place were noted start-ups (increasing from 5% to 9.8%).

## Methodological aspects of evaluation

In an era of growing competition and increasing pressure on the high effectiveness of activities undertaken by various players of economic life, researching the causal effects of public treatments is the foundation of the so-called evidence-based policies. It allows the capturing of the causal relationships between treatments undertaken, the results observed and the determination of the real effect (the net effect); that is a treatment-induced change, which cannot be ascribed to the impact of other factors. The theoretical framework for reasoning in the scope of the identification of causal dependence determines the so-called concept of the counterfactual (HECKMAN 2005), which

boils down to the idea of attempting to assess the hypothetical effects of events, which are an alternative to what actually happened. This is related to the occurrence of the fundamental problem of causal inference (HOLLAND 1986), since observing for the purpose of a specific unit at a specific time the effects of two mutually exclusive events (participation and non-participation in a programme) is impossible.

In studies of causal effects, based on the counterfactual, two trends can be clearly seen: the statistical trend, which was contributed by the significant scientific works of RUBIN and ROSENBAUM (1983) and the econometric trend whose leading representative is HECKMAN (2005).

The outcome of that research is widely applied in such fields as education, health care, economic policies, social policies or labour market policies. In the area of labour market policies, the biggest methodological progress in investigating the causal effects of labour market programmes aimed at helping the unemployed to find employment was made in the nineteen nineties with the increasing processing power of computers and the creation in some countries of central databases, based on the existing data derived from administrative resources. They contain a wide range of individual information about individuals including the exact course and the main characteristics of previous employment, history of individual episodes of unemployment along with participation in active labour market programmes or social security benefits. A significant increase in unemployment occurred in the 90s in many European countries, and also gave rise to the development of the research. The United States and Australia, and such European countries as Germany, Austria, Switzerland, Denmark and Sweden can boast of significant achievements in researching the field of the real effects of active labour market programmes.

For the purpose of the analysis of causal effects of different treatments at the microeconomic level, experimental methods or quasi-experimental are applied. Due to the wide access to administrative data which are less expensive than the experimental type of data, studying the effects of active labour market programmes in European countries was based primarily on quasi-experimental methods. Research undertaken in the 90s focused on a traditional static approach (static evaluation framework) consisting of juxtaposing participation in one active programme at a specific point in time with the situation of non-participation in any labour market programme (comparing the results obtained in two groups: the treatment group and the control group). The main interest was to investigate the real impact of unemployed persons' participation in those programmes on their employment situation after the programme, measured by an unemployed person's taking up employment, shortening the duration of unemployment, or the level of income earned from work. Depending on the adopted research objectives and the availability of certain sets of

micro data, the following methods were mainly applied: regression analysis, methods based on matching, in particular, the propensity score matching method (in case of the selection of observable characteristics), the combination of matching with the DiD estimator (in case of the selection of observable and unobservable characteristics) as well as the discontinuity regression design (for treatment with an arbitrarily adopted selection threshold).

# Effectiveness of active labour market policies – empirical evidence

The effectiveness of the fundamental active labour market policies applied in Poland in 2009 was evaluated. The analysis performed was quasi-experimental and was based on a propensity score matching method (HABER 2007). In the view of many evaluation specialists, this method gives satisfactory results in the scope of the evaluation of active labour market policies at the microeconomic level.

The effects of the policies were evaluated based on information describing the unemployed taken from the Syriusz database (the information system for public employment services in Poland) exclusively. That means that the labour market status of participants of active labour market measures as well as of unemployed persons not participating in the programmes was determined based only on the data stored in the register of a job centre.

In the present research in the case of a group assigned to active forms, the gross effect stands for the percentage of persons who after the completion of a programme were deregistered due to undertaking employment within three

Table 5
The gross and net employment effects of active labour market policies in Poland

| Active labour market measures  | Gross employment effects (in %) | Net employment effects –<br>impact (in % points) |
|--|---------------------------------|--|
| Training   | 43.2                            | 8.7***   |
| Placements   | 34.0                            | 3.1***   |
| Intervention works   | 45.0                            | 15.6***  |
| Socially useful works  | 11.2                            | -8.9***  |
| Public works   | 30.3                            | 4.7  |
| Means allocated to undertaking business activities (start-up incentives) | 100.0                           | 62.6***  |

<sup>\*\*\*</sup> p<0.01, \*\*p<0.05, \*p<0.1

Source: own calculation based on the data derived from the Syriusz system.

months after the date of its completion. The net effect of a programme constitutes the difference between the percentage of the employed from a group of unemployed persons participating in active labour market policies and from a control group matched by means of the nearest neighbour method.

On the national scale, the most effective in the understanding of the impact on employment turned out to be start-up incentives and intervention works. The positive employment effects were also generated by the supply–oriented instruments of the labour market policies, i.e., by vocational training courses and placements; however, these effects were considerably weaker than the effects resulting from means allocated to undertaking business activities or intervention works. Participation in socially useful works had a negative impact on the chances of being employed and the impact of public works proved statistically insignificant.

The employment effects of subsidies for engaging in economic activity as well as of intervention works appear to be overvalued due to the measuring method applied in labour offices, which leads to a considerable overstatement of the gross effects of those instruments.

The interpretation of the obtained effects of training is a more complex task. The training courses analysed concerned various vocational areas and these courses varied by their length and quality of teaching. For instance, longer training courses due to the lock-in effect may have had much weaker impact than short ones. The poor learning outcome may have been influenced by both the factors related to didactic aspects of the training and by mismatching the teaching content to the current needs of the labour market. The low effectiveness of vocational training courses may also be explained by deadweight loss, which means that those forms of raising qualifications were to a large degree targeted to persons who portended well on the labour market and would undertake employment without using this type of support. The net effects of training courses may have also been undervalued.

The net effects of placements also seem surprisingly weak, though young unemployed people without any vocational experience willingly apply for it. Mention must be made that as of 01 February 2009 the body of persons eligible for placements was extended to the entire group of the most disadvantaged in the labour market and this fact has probably contributed to the lowering of the effectiveness of this form of preparation. In light of the research conducted by the Institute for Structural Research (Bukowski 2009), placements constituted an effective form of supporting unemployed youth who completed primary or secondary education. At present, placements are becoming a more attractive instrument for employers than intervention works since placements provide employees who do not need to be paid for their work and there is no obligation to guarantee employment to them on the completion of the placement. It may be inferred that the inappropriate targeting of placements has

become a major factor in determining the low employment effectiveness of this instrument.

The results of the analysis confirm that socially useful works are not instruments that help persons stop being unemployed. Participation in socially useful works impacted negatively on an unemployed person's chance to undertake employment. However, it does not mean that using this instrument should be abandoned. Socially useful works are intended to realise goals that are different from other programmes. Their role consists in preventing demoralisation and in shaping positive attitudes to work in persons endangered by social exclusion. Therefore, the evaluation of this programme based only on measuring employment effects does not appear to be fully justified since undertaking employment is not the only measurement of the success of socially useful works.

Public works, in a similar way to socially useful works, cannot be looked upon as a means of labour market policy that increases the chances for being employed. The earlier evaluation research on active labour market policies in Poland conducted by the Institute for Structural Research as well as other analyses of employment programmes in selected EU member states confirm the occurrence of the negative net effects of public works or of a statistically insignificant impact of that programme on the likelihood of stopping being unemployed (Caliendo et al. 2005, Kluve 2007). Public works are usually accompanied by stigmatisation that most likely has a significant impact on the effectiveness of that form of aid. Public works cease to fulfil preparedness functions and more and more frequently they are functioning as an instrument of passive labour market policies whose major goal is to improve the material situation of the unemployed that fall into hard-to-place groups of the labour market.

### Conclusions

Active labour market policy should play an important role, especially in the situation of poor and uncertain labour market performance. For Poland, the most important challenge is to undertake more in–depth studies of the causal effects of active labour market policy.

Along with the evolution of the role of active labour market policies, increasingly there is also a focus on other goals than merely finding a job. For instance, preventing inactivity and being out of the labour force, decreasing structural mismatches by creating opportunities to improve human capital and increasing, therefore, the variety of strategies used in the preparation of the unemployed (*e.g.*, flexicurity, transitional labour markets, work first) and

instruments. It is necessary to extend and modify the methods previously used in the evaluation of labour market policies.

Firstly, the set of the analysed programme outcomes could be expanded significantly. Depending on the specifics and the objective of the programmes, their impact on various aspects might be studied, for example, on taking further education, participating in another active programme, joining the economically inactive population, remaining employed after the program completion in the long run, the flow rate from unemployment to employment, or annual earnings.

Secondly, a dynamic approach should be introduced in the evaluation research of labour market policies.

Thirdly, in the meantime, the knowledge of the factors that co-determine the participation and programme outcomes also increased. Studies of causal effects should include a much wider set of variables describing not only a specific episode of an individual's unemployment and his/her socio-demographic characteristics, but also the exact course of their career.

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