REVIEWING DEVELOPMENT OF ACTIVE LABOUR MARKET POLICIES AND THE EVALUATION TECHNIQUES

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Abstract: Active labour market policies are commonly used tool to fight unemployment. In the early 1960s all Scandinavian countires have introduced several different measures to have an effect on their labour markets. In the late 1970s in most developed countries of OECD government expenditures on those policies reached the level of 1-1.5% of GDP. High levels of expenditures created a need to assess the impact of such measures and perform their cost-benefit analysis. Evaluations have in the previous 30 years been undertaken by using different methods: from experimental and quasi-experimental, to micro and macro analyses. Most precise evaluations are based on complex econometric methods. Moreover, during last decade there have been several meta-analyses to make cross-analysis of evaluations made worldwide in a long time-span. General conclusions of most papers are that ALMP do not have very high influence on the employability. The best results are experienced in services provided by local national employment services, as well in training programs, especially in on-job training. In the last few years there have appeared some indications that subsidized employment has high positive effects, however there is no general consensus on that matter. Despite large number of published papers on evaluations, there has been no research aimed on analysing overall ALMP effects on the economy, and creation of a model which could ex-ante estimate future effects of ALMP.

Key words: *Active policies, evaluation, econometric models, economy*

JEL Classification: J08, E24, J21, H55

INTRODUCTION[1]

Unemployment is one of the most important economic and social problems of today. For that reason, the issues of unemployment became one of the key components of labour economis. Labour economics is almost for a whole century the field of intense interest and great progress in the economic science, both in theoretical and in practical terms. Although modern labour economics is based on microeconom(etr)ic studies, which almost completely dominated in the past two decades, we must not forget the importance of macroeconomic aspects and phenomena observed on the higher scale.

The analysis of the unemployment economic theory begins with pre-Keynesian theories; it goes over Keynesian interpretation of mass unemployment, and finally deals with contemporary unemployment theories. It has shown that problems and methodology in research and theoretical perspectives on unemployment have significantly changed over time under the influence of social and economic environment. So far there has been no comprehensive theory which could offer lasting solution to complex problems of the labour market.

The goal of this paper is to present the process of Active labour market policies (ALMP) development and to analyise different evaluation techniques.The paper consists of five parts: The first part will describe a brief history of active policies in the world. In the second part we analyse expenditures on ALMP in developed, developing and transition countries. In the third part we present general principles of evaluations and their importance including types of evaluations and different approaches to evaluations classification. The fourth section brings literature review and meta analyses which have been implemented during the last decade. Finaly we give conlusions and recommendations in the fifth section of this paper.

THE BRIEF HISTORY OF ALMP

Active Labour Market Policies in its original form were created in the early decades of the twentieth century. They represented an attempt by public institutions to open job vacancies by introducing public works. As a consequence of World War I and great depression caused by the collapse of the New York stock exchange these measures were applied in two cycles of the so called "*New Deal*" in the U.S. Economic theorists of that time, led by Keynes were engaged in development of the (un)employment theory and the ways on how to cope with labour market trends. By using the theory of multipliers, firstly introduced by Kahn (1931), Keynes (1936) had managed to oppose the claim that public works and government spending can not solve the problems in the labour market but that only cause inflation. Kahn has demonstrated is the multiplier model that government interventions in the labour market not create only primary employment, but that there is so called "secondary employment" as well. Although for over eight decades there is such a theoretical assumption, one of the main problems in modern approaches to evaluations of active labour market programs is that there is still no model that estimates the level of the secondary employment.

According to basic economic principles, labour demand is a derived demand. For this reason, unemployment must be observed as a consequence of economic trends. The neo-liberal approach to economics is based on the hypothesis that the market is the best and only necessary regulator of economic trends. However, in periods of recession, Keynes economic theory always appears as an alternative to this approach, and justifies government interventions through the assertion that the necessary corrective influence of irregularities in the labour market. Classical economic theory states that the reduction of wages is sufficiently to increase the demand for labour, and that the unemployment can be managed through the change of wage levels. However, Lord Keynes's interpretation suggests that the earnings (wages) are inflexible downwards, and therefore wages reducion will not be enough to sufficiently increase demand for labour (job offers), but the effect will be partially transferred to the reduction of the aggregate price level and thus decrease aggregate income. The consequence is lower aggregate demand, which according to

the above basic economic principles, results in a decrease in demand for labour - which is called the "Keynes effect". The unemployment in that way might be called involuntary or cyclical unemployment. In addition to unemployment resulting from insufficient aggregate demand which can be corrected by shifting on "Phillips curve" with an increase in inflation, there are two other basic categories of unemployment - structural and frictional, which result from mismatches in the labour market. Having introduced such division of unemployment types, there came the need for different types of market interventions. The question is what theoretical framework is suitable for the formulation of necessary interventions. In addition to the traditional approach to "cheating on the Phillips curve", or enhancing the relationship of unemployment-inflation (Baily and Tobin, 1977), it is understood that the present unemployment level is partly the consequence of unemployment in the previous period. This is proven in practice by the fact that the extension of unemployment reduces the probability of an individual tp find the way out of it. Since the cost of increased level and length of unemployment are extremely high, it was necessary to create a model which could generate significant positive effects on labour market. That opened the way for introduction of Active labour market policies.

Although they are basically set up as a policy, formulated by the political representatives, and implemented through the political agreement, the two main adapting functions of ALMP are economic and social (welfare). The objectives of active measures are to reduce the effects created by the above named three types of unemployment. This includes mitigating the lack of available jobs through subsidies and public works, support reallocation of labour and reduce the mismatch in labour skills through various forms of training, etc. Betcherman et al (2004) note that ALMP are used to reduce the risk of unemployment and increase wages of workers, and programs are implemented to enhance labour supply (eg training), increasing the demand for labour (eg, public works, subsidies) and improving functioning labour markets (for example, employment services). Active measures are often aimed at long-term unemployed workers in poor families, and other discriminated groups. Active labour market measures are not intended to address long-term mass

unemployment, but are only defined as programs that enhance the possibility of (re) joining the labour market.

Contemporary ALMPs were created after the Second World War and until today have gone through (at least) three development stages. The first stage begins after World War II, primarily in the Scandinavian countries, as an integral part of the model of economic and social change. At that time there was a need to set up systems that would reduce short-term inflationary impact of higher employment levels, and at the same time help solve problems fast-growing demand for labour (OECD, 1964, Barkin, 1967). Nickel et al (2001) showed that in the period from 1960 to 1980 there has been a significant shift to the right on the Beverage curve as a result of the initial measures, which resulted in better matching of vacancies with skills of unemployed persons. Similar analyses are presented in other papers (OECD 1993, Katz 1994, Calmfors 1994, etc.).

The second phase was initialized in France, Germany and the United States during the oil shock crisis in 1973-1975 by introduction of new programs targeting labour supply, specifically vulnerable groups. Estevao (2003) and Betcherman (2004) pointed out that the constant increase in the unemployment rate in the 1970s and 1980s assessed inter alia as a consequence of a mismatch in labour supply and labour demand. Unemployment level in OECD countries grew from 3% in 1973 to 7% in 1988 (Martin, 2000). At the same time there was a significant growth on the supply-side as a result of the emancipation of women and young people who have entered the labour market. New active policies were generated to increase labour demand by creating jobs; alongside passive measures such as early retirement. The effects of these measures were short-term and proved to be insufficient to curb rising unemployment in the long-run.

The third stage relates to the period of the 1990s when ALMPs have become an important policy to accompany structural changes in the EU. The goal was to encourage unemployed and inactive persons to enter into the labour market. Interventions were extensively used to facilitate adjustment of labour to market needs. During this period ALPM became a part of the employment strategies in transition countries in the form of

public works or training programs (OECD, 1990). Framework for the labour markets (OECD, 1990) claimed that structural defects were primarily on the supply side and that it was necessary to create medium and long term strategies to facilitate adjustment. It was also recommended to redirect spending from passive to active measures. During the transition period, these measures have advanced from state to market-oriented measures, but have not become part of a lasting solution to risk management in the labour market, especially in countries in transition.

As noted ALMP were originally introduced in developed countries of OECD and EU. They were later transferred to the Middle East and North Africa, while the in East Asia they have not been so widely used. In the last fifteen years, the implementation of these measures has become widespread in Central and Eastern Europe and the CIS region (Spevacek, 2009).

Three groups targeted by these measures are unemployed, employed at risk and inactive population. Besides them, there are situations where the authorities provide special assistance for the promotion of employment groups that do not belong in these three categories. Such measures include programs for youth employment, which are available to those young people who already work (European Commission, 2006).

Active labour market policies are today classified in accordance with the document titled *Labour Market Policy Database: Methodology* (European Commission 2006). This methodological document classifies labour market policies into three groups: a) Labour market services (counseling, mediation); b) measures (training, job sharing, subsidies, support to employment, public works) and c) support (financial, support to the unemployed and early retirement). This classification is somewhat different from classical classification of active policies presented in table 1, where services and measures belong to a same category, and in reporting there may arise some confusing results.

Table 1 – Active labour market policies in OECD countries, archetypical types of programs and generic purpose

Type of program	Generic purpose
Public employment services	Improve marching efficiency
Labour market training	Attenuate skill mismatch; human capital accumulation
Employment incentives / start-up incentives	Improve job matching process, increase labour demand
Direct job creation / public sector employment	Increase labour demand, prevent human capital deterioration
Youth measures	All of the above
Measures for disabled	Integrate discriminated persons into the labour market
Note: This classification is usually used in OECD and Eurostat reporting	

Source: Lehman and Klueve (2010, pg. 38)

The function of public employment services is primarily to co-ordinate matching labour demand and offer. Training measures aim to reduce the mismatch between skills required, and subsidy measures are aimed to increase the demand for labour. Direct job creation is often considered the last chance to influence the state labour market trends. Their next goal is to increase demand for labour, prevent loss of human capital that results from long-term unemployment. It is known that each person loses 50% of their knowledge which is not used during a period of one year (Zubović, 2010), and thus re-integration of employees as soon as possible has great significance. Finally, measures for people with disabilities are significant primarily in the reduction of discrimination and exclusion of this group of people from the labour market.

EXPENDITURES ON ALMP

The consolidated data on expenditure on ALMP are available from 1985, which coincides with the end of the second phase of development of active measures. This can be attributed to the above named "Framework for Labour Market Policy" by OECD, which was the first institution to begin

with systematic recording of government expenditures on ALMP of its member states. Table two shows data on spending on active measures as a share of GDP for the period since 1985.

Table 2 - Expenditures on ALMP in OECD member states (% of GDP)

	1985	1990	1995	2000	2005	2008
Australia	0,36	0,22	0,74	0,37	0,37	0,29
Austria	0,28	0,32	0,38	0,52	0,63	0,67
Belgium	1,17	1,09	1,21	1,16	1,11	1,28
Canada	0,61	0,49	0,55	0,4	0,32	0,3
Czech Republic	..	..	0,13	0,2	0,25	0,23
Danemark	..	1,06	1,72	1,89	1,58	1,35
Finland	0,73	0,84	1,42	0,89	0,91	0,82
France	0,6	0,72	1,19	1,19	0,89	0,81
Germany	0,58	0,79	1,19	1,23	0,89	0,81
Helas	0,16	0,19	0,4	..	..	..
Hungary	..	..	0,41	0,38	0,3	0,3
Ireland	1,06	1,06	1,35	0,81	0,64	0,7
Italy	..	..	..	..	0,57	0,45
Japan	..	0,33	0,32	0,28	0,25	0,26
Korea	..	..	..	0,38	0,12	0,2
Luxembourg	0,41	0,2	0,14	..	0,5	0,42
The Netherlands	1,31	1,27	1,36	1,47	1,3	1,04
New Zealand	0,87	0,88	0,68	0,49	0,39	..
Norway	0,59	0,89	1,25	0,61	0,74	..
Poland	..	0,12	0,38	0,25	0,42	0,56
Portugal	0,21	0,48	0,5	0,63	0,69	0,57
Slovak Republic	..	..	0,75	0,31	0,34	0,25
Spain	0,33	0,78	0,43	0,79	0,72	0,73
Sweden	2,09	1,68	2,35	1,75	1,29	0,99
Switzerland	0,19	0,21	0,47	0,56	0,75	0,47
UK	0,71	0,58	0,43	0,24	0,45	0,32
USA	0,26	0,23	0,19	0,17	0,13	0,17
Average	**0,66**	**0,66**	**0,80**	**0,71**	**0,64**	**0,57**

Source: addopted on OECD (2011)

The data in table 2 clearly show the tendency in some groups of countries. The first group consists of non-European countries with relatively low level of expenditure which goes up to 0.3% with a tendency of continuous fall. The second group is made of the Scandinavian and neighbouring countries, where the level of spending was stable at the level of around 1% of GDP, until 2008 when it began to decline slightly. The third group consists of the Mediterranean countries, where the share of spending is about 0.7% with no significant oscillations. The fourth group consists of (transitional) countries of Eastern Europe, where spending is at a relatively low level with a slight increasing trend. Germany, Austria and Ireland are the countries that have their own trends which are different from all abouve named four groups.

Table 3 – Expenditure on ALMP in transitional countries of EU (% of GDP)

	2006	2007	2008	2009
EU 27	0,70	0,64	0,65	...
EU 15	0,72	0,67	0,67	...
Cyprus	0,09	0,13	0,11	...
Malta	0,15	0,14	0,18	...
Transition countries of EU*	0,28	0,25	0,23	
Bulgaria	0,44	0,36	0,32	0,28
Czech Republic	0,26	0,25	0,23	0,22
Estonia	0,07	0,05	0,07	0,24
Hungary	0,28	0,31	0,30	...
Latvia	0,26	0,17	0,13	0,32
Lithuania	0,27	0,32	0,22	...
Poland	0,45	0,50	0,56	...
Romania	0,14	0,11	0,09	0,07
Slovak Republik	0,32	0,22	0,26	...
Slovenia	0,27	0,20	0,18	0,33
* Transitional countries of EU are 10 countries of Eastern Block				

Source: Eurostat (2011)

The beginning of economic reforms in countries with centrally planned economies (countries in transition) from the beginning of the 1990s had

strong effect on the increase of open unemployment, and increased levels of unemployment to above the average of EU 15 countries. For this reason, in these countries funds allocated for ALMP began to increase. This increasing trend has been maintained by 2005, when it began to decline slightly, while the level of funds allocated for passive measures remained at the same level of about 0.3% of GDP. Data on trends in transitional countries is shown in the table 3.

Like in other transition countries, Serbia experienced similar trends in the labour market, and consequently increased spending on labour market policies. In Table 4 one can see the levels of spending on active measures in Serbia during the transition period.

Table 4 – Expenditures on ALMP in Serbia

Year	Expenditure (mil. Dinars)	Share in GDP
2005	750,00	0,04
2006	1.300,00	0,07
2007	2.384,40	0,10
2008	3.014,00	0,11
2009	3.500,00	0,12
2010	3.700,00	0,12
2011	5.550,00	0,17

Source: MERR (2011)

Distribution of funds among measures is shown in the table 5. According to presented data it is visible that Serbia is following a trend recommended by the European Commission that most of the funds should be used for education and training. Their share increased from initial 1% in 2008 to 48% in 2011, the share of public works decreased from 37% to 18% of total expenditure, while subsidiesed employment decreased from 50% to 33%.

Given the volume of funds allocated to ALMP, we can expect that they will have some impact on target groups or the microeconomic level. However,

these effects will spill over into macroeconomic level. Programs such as job creation, wage subsidies or training not only affect the employability of workers targeted groups, but may influence the relationship between inflation and unemployment. One of the key justifications for the use of active measures is that, under appropriate circumstances can reduce the inflationary impact of increasing employment in the short term and the long term to reduce structural unemployment (OECD 1993).

Table 5 – Distrubution of funds among types of measures (million RSD)

Type	2008	2009	2010	2011
Active job search	5,95	5,00	5,00	10,00
Training and education	8,05	1.495,00	2.095,00	1.890,00
Subsidised employment	1.535,00	700,00	900,00	1.300,00
Public works	710,00	1.300,00	700,00	700,00
Total	3.014,00	3.500,00	3.700,00	3.900,00

Source: MERR (2011)

PRINCIPLES ON ALMP EVALUATIONS

Findings in the section two lead to necessity for evaluation of the funds used in active labour market policies. If governments use up to 1% of their GDP at annual level for financing those policies it is necessary to implement continuous and precise evaluation of the effects these policies create. To what extent should the authorities rely on active labour market programs? This is a controversial issue on which there are many answers. Proponents argue that active policies are the most direct instrument to combat unemployment and poverty. Opponents counter that active policies largely waste public money and that any benefit to the participants is realized entirely at the expense of other workers. For this reason it was necessary to precisely evaluate impacts, effectiveness and benefits of the interventions.

Assessment and evaluation of active labour policies require good knowledge of evaluation methodology carried out in different countries.

At the same time one must take into account the specificities of the country in which the assessment is conducted including the level of economic development issues, labour market trends and the influence of state regulation on labour market imperfections. The literature on the evaluation indicates that during periods of economic growth effectiveness of active measures increases (Dar and Tzannatos, 1999), which means that it is necessary to observe a longer period of time so as not to get overestimated results.

According to Harrell et al (1996), there are four basic types of evaluation *performance monitoring, impact evaluation, cost-benefit analysis* and the *process evaluation*. Hujer et alia (2002) give the instructions on what the evaluation should include: the process of adjustment of supply and demand for labour; the benefit of the unemployed; the competitiveness of the labour market; productivity.

Similarly Fay's defines evaluation as consisting of three steps (Fay 1996). First one needs to assess the impact of the individual (micro-evaluation). Second, we should examine whether it achieves sufficiently large net social benefits (macro-evaluation). Finally, it should answer the question whether this is the best outcome that could be achieved for the funds spent. Since there has been a great progress in the IT sector in the past fifteen years, such as databases and various state institutions and the associated improved, there cam an opportunity for adding a fourth step - to evaluate the net social gains from policy implementation. This fourth step is based on Harrella and Razik principle with a difference that at macroeconomic level we do not assume that the increase in the level of employment is the main goal of active measures. It is necessary to conduct the evaluation coverted into monetary value, where the input parameters - the amount of funds allocated to ALMP, should be compared with output parameters - the value of increased gross value of work of new employees for the time spent at work over time.

The first scientific papers on evaluations, for example, the one written by Calmfors (1994) gave very confusing results. However after Lehman and Klueve (2010) improvement the research methodology, recent studies

show that ALMPs do have significant effects, both on employability and the net increase in employment, especially in developed countries,.

Many other papers define methodological framework for the evaluation of the impact of ALMP (Dar and Tzannatos 1999, Daguerre, Etherington 2009, OECD 1993). For example, de Koning and Peers (2007) focus on assessing the net impact by using experiments or non-experimental models (matching and econometric methods).

In experimental (classically designed) evaluations there is a randomly selected sample before the intervention (measures). If the sample is large enough and if there is a properly set control group, by chaging the independent variable (in this case participation), we may measure the change in the achieved results. Such changes can be attributed to participation in ALMP. Such experiments have their disadvantages, like inproper selection of a random sample, change in behavior after learning about participation, high cost of creating large samples and some ethical issues on deliberate exclusion of specific group from participating in the measure.

Quasi-experimental techniques differ from experimental because control group and sample are selected after the implementation of selected measures. In analyzing the effects by this method some econometric techniques are used to correct the disparities between the two groups. The advantage of this evaluation is that the price is far lower and that active measures may be implemented independently of the evaluation process. There are several quasi-experimental methods which include: a) regression analysis with monitoring of observable variables, b) regression analysis of observable and unobservable variables, c) different matching methods. In a) we define observable variables (eg gender, age, education level) that differ in the target and the control group. Evaluation of the impact of these factors enables us to assess the influence of the measures on employability. In b) in addition to defining the observables, we introduce unobservable variables (difficult to measure, such as innate ability or behavior change after the inclusion of the measure) which can alter behavior and results. Finally, the matching methods create a subset of the

control group whose members are paired with participants in the factors measured, and thus get precise and robust results.

Martin (2000) divides the evaluation of individual programs into two basic groups. The first group measures the impact program participation on employment and earnings after exiting the program, by comparing participants' results with the results of the control group. The second group measures the net effect on the aggregate employment, taking into account externalities such as deadweight, substitution and displacement effects. Martin and Grubb (2001) make addition to such division so that the first group utilise micro data to measure the impact of the program on employability and earnings of an individual, while the second use aggregate data to measure the net effects of programs on aggregate employment and unemployment.

Somewhat different division of the evaluations is offered by Spevacek (2009) and Fields (2007, p. 32). They identify six types of data analysis aimed at measuring and evaluations of the interventions in the labour market:
- Aggregate cross-sectional quantitative data analysis
- Cross-sectional study of micro data analysis
- Panel data analysis
- Cross-country time series analysis
- Experimental studies
- Qualitative data analysis

The first scientific papers on the evaluations, like Calmfors (1994) brought very confusing results. Development of information systems facilitated data analysis, and Lehman and Klueve (2010) claim that by improved research methodology, recent studies show that ALMPs do have the positive effect both on individual likelihood of exiting unemployment and on aggregate employment growth, especially in developed countries.

While the first papers on the development of evaluation methodology were written in the United States, over the past fifteen years significantly increased the number of papers among researchers in Europe. In the transition countries of Central and Eastern Europe during last ten years

also emerged several high-quality studies on the impact of ALMPs. These studies have helped to better understanding of labour markets in the new economic environment (Lehmann, Klueve 2010). In transition countries, the available budgets for ALMP are very limited, and for that reason it is important that the effects are properly assessed in order to make the right distribution among different types of measures. Evaluations in transition countries include several papers (Lehman, Klueve 2010, Ognjenovic (2007), Bonin, Rinne (2006); Betcherman, Olivas, Dar (2004); Spevacek (2009) and many others).

REVIEW OF EVALUATIONS AND META-ANALYSES

The literature on empirical evaluations of ALMPs is very complex and often with contradictory conclusions depending on country, time period of observation and the specific program being observed. As noted above, most evaluations were conducted in developed countries, although recently there are findings in other countries. Evaluations are conducted by international organizations, specialized research institutes and individual researchers. Most scientific studies have analyzed the policy in individual countries; while only few studies are multi-country evaluations. In this section we will present a summary of various evaluations and meta-evaluations

Dar and Tzannatos (1999) conducted a review of 72 evaluations conducted in several countries and provided an overview of the effects. Betcherman et al (2004) in their work add to initial 72 evaluations another 80 in their review. Summarized effects of 152 evaluations show that the employment services and mediation generally are the most cost-effective interventions. Impact on employability and earnings is positive in general, and costs are lower than for the other measures. Training programs for the unemployed can also have a positive impact on employability, but not on earnings. These programs are most effective when conducted in on-job. Other types of training - for workers who became unemployed as a result of mass layoffs and youth participants in the labour market generally give less favorable results. Interventions that are successful often include several measures (education, employment, social assistance, if needed), which

complement the training. The review also proved the weak effects of job creation - employment subsidies and public works. Also, Public Works have shor-time positive effects, but in most cases do not increase the employability of participants after the completion of measures. Finally it was confirmed that projects of subsidies for self-employment have a positive impact on the small number of users, but these are mainly people with higher education levels.

Martin and Grubb (2001) in their overview of evaluations conducted in the period 1985-2000, without a clear emphasis on the coverage, concluded that the impact of many measures being implemented in the labour market do not have encouraging results in terms of increasing employment and earnings, especially when it comes to programs for youth. However, they stress that there are some programs that provide positive indicators, such as counseling, subsidies for employment in the private sector and training, but with a note that the effects are small.

Calmfors et al (2002) gave an overview of more than 70 evaluations conducted in Sweden. He classified them on 30 microevaluations and 40 macroevaluations. Among other findings, he notes that measures only slightly help match supply; demand for labour and that subsidized employment results in high level of substitution (displacement); and training programs are not effective. Conclusion of the research is that in both micro and macro evaluations the results are disappointing. In general the programs help reducing unemployment level, but at the samed time not having impact on the aggregate level of employment. The greatest impact was achieved in increasing activity level. Also very important conclusion of the study is that the programs lose their effectiveness with an increase in volume, so it is advisable to keep the volume at a lower level, which for Sweed is below 1% of GDP.

Kluve and Schmidt (2002) have conducted a meta-analysis, a technique that synthesizes a variety of statistical studies. They assessed the results of 53 evaluations using the binom indicators of THE ALMP effects. For explaining the effects of measures they have analyzed different types of programs, design studies, implementation time and impact of the macroeconomic environment. Results showed that the probability favors

training for increasing employability, while public works and subsidies almost never have a positive impact.

Greenberg et al (2003) also used meta-analysis of effects for the synthesis of 31 evaluations in 15 voluntary training programs conducted in the United States between 1964 and 1998. Programs use different types of training, including structured job search, continued education, training, on-job training, as well as programs that allowed subsidized employment in the public or private sector, in order to determine which programs and how much they have influence on earnings growth. The results show that programs are most effective for women, with moderate effects on men and no effects for youth. The greatest impact of training programs are made for women who have generated a wage increase of around 2,000 $ a year.

Estevao (2003) uses substantially different methodology for evaluation of active measures. It is based on panel data from 15 OECD countries on the amounts of funds allocated to ALMPs and their distribution. By controlling data on institutions, peculiarities and the level of economic development of different countries, he found that the greatest effects are achieved with different types of subsidies, at the same time with a negative impact on wages. Very important part of this paper os that the author has established linear equation for calculating the level of allocations to active measures, depending on the rate of employment:

$$ALMP/GDP = 0.03 - 0.04 * ER \qquad (1)$$

where ER stands for employment rate.

He also set an equation for distribution of funds between active and passive measures:

$$ALMP/GDP = 0.28 + 0.36 * PLMP/GDP \qquad (2)$$

With PLMP representing passive labour market policies.

Estevao also showed that there was a substantial change in the effects of ALMP for the period before 1993 and beyond. While in the period 1985-

1992 the coefficient was negative and amounted to -0.12, in the period 1993-2000 there was a growth of 1.88, meaning that every 1% increase in spending on ALMPs (as a share of GDP) resulted in an increase in the employment rate by 1.88%.

Betcherman et al (2003) have made a review of the effects of nearly 200 evaluations in developed and transitional countries. The survey concluded that most effective measures are counseling, with training being effective if implemented at work (on-job traning). The effects of subsidies were higher in more recent studies, but generally they do not have a significant effect. He also shows that the effects are not differing in transitional countries compared to developed ones. However in transitional countries he emphasizes a problem of a large share of the informal economy (employment) which significantly alters the results of evaluations.

In their research, de Koning and Peers (2007) also used meta-analysis, although they note limitations of price efficiency, the time horizon of observation and non-economic aspects including health and social exclusion. Using regression analysis, with 155 observations constituted of net impact evaluations they have observed a set of controllable factors, as stated in an equation:

$$NI_i = X_i \beta + \varepsilon_i \tag{3}$$

NI stands for a net impact; X is a group of factors affecting the volume of estimated effects, and an index number of studies (evaluation), β is a vector of unknown parameters and ε stands for an error.

With such a precise econometric approach de Koning and Peers came up with results that be accepted as a basis for deciding on the introduction and implementation of ALMP. The conclusion is that the net impact of ALMP is only 3%. The greatest impact create training and counseling with 7%, while subsidies have negative effects.

Spevacek (2009) has done pioneering work in the evaluation survey conducted in Central and Eastern Europe and CIS. The review included 20 studies from 10 countries and 4 cross-country studies. The survey

concluded that econometgrics significantly contributed to the quality of evaluations, and that it is necessary to increase the number of evaluations on cost effectiveness. In general it is the overall conclusion that ALMP reduce unemployment, increase the number of employees. Not all types of measure have equal effects, with consulting and training being widely applied and most effective.

Kluve (2010) added on hios study from 2002, by including greater number of studies and expanded the number of countries analyzed. Introduction of improved methodology by using trinome indicators facilitated better monitoring of effectiveness of ALMP. Conclusion of this paper is that since ALMPs play a key role in the "European employment strategy" and that the funds allocated for these measures 2008 amounted to € 80 billion of which 57 for the measures, and 23 billion for services, there is a growing need to develop scientifically based method of measuring the effectiveness of various types of ALMPs. Kluve analyzed a total of 137 programs from 95 evaluations in 19 European countries using the method of meta-analysis. He found that 54% of programs achieve positive effects, 21% had significant negative effects, while in 24% of the studies were not able to measure neither positive nor negative statistically significant impact. Using trinome results as a dependent variable and by controlling independent variables which included the types of programs, research design, institutional and economic situation, he has come to the conclusion that trandicionalni mediocre training programs are likely to have a meaningful impact on employment rates. Compared with training, subsidies and support programs in employment had a 50% positive effect, while the public works programs had 25% less chance of success. Finally Kluve concludes that youth programs have very little chance of success, and that the positive signs in recent years show that the national employment serviced became more effective compared to external projects.

Finaly the study of Forslund et al (2011) showed that depending on the phase of economic cycle, different programs have different effects. They showed that in periods of recession, the greatest effects provide training programs, since they significantly reduce length of job search.

CONCLUSIONS

Active Labour Market Policies (ALMPs) first appeared between the two world wars, and they were based on the Keynesian interpretation of unemployment, with the wider use after the World War II. Today they have become one of the most important elements of the European Employment Strategy. Given the scope and volume of their application, which is in the EU over 80 billion euros a year, it was clear that there was a need to address the question of their usefulness. Review of over 200 evaluations in more that 100 research papers shows that there are different conclusions in the matter of the effectiveness of ALMP.

Such a large number of papers gave answers on the effectiveness of individual programs on their participants, as well as on the net effects on macroeconomic trends in employment. The fact is that during the period of more than half a century of implementation of ALMP they have become a significant part of life for all inhabitants in developed countries, while in the last 20 years that is the case with economies in transition as well. The basic functions of ALMP are economic and social. Since from the presented results one can see that the effects are limited from the economic point of view, we may conclude that measures have a far greater social impact than economic. This means that active measures are used in order to increase the psychological safety of participants in the labour market, as well as confirmation that decision makers are taking care of the population in working age in the periods when they are not productive, or when they are unemployed. In this paper we have not made the analysis of social effects of active measures, and for that reason we have not given a final conclusion on non-economic effects of ALMP.

The methodology used in research on the effects of active measures is steadily improving in quality, but it must be stressed that all evaluations, reviews and meta-evaluations have not provided answers to two very important issues. The first question is how to allocate funds for active measures to achieve the highest net effects. The other is what is net monetary social benefit achieved by allocating resources for the implementation of active measures. These two questions remain open for future research.

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