Active labor market programs and the cycle

Jochen Kluve

Paper prepared for the joint OECD / University of Maryland conference
on “Labor activation in times of high unemployment”

This draft: 11 November 2011
–preliminary–
–do not quote–

Abstract.

This paper presents an initial analysis of the relation between ALMP effectiveness and the business cycle across OECD countries. The analysis is based on a data set combining 187 particular program evaluations with indicators for the business cycle and labor market institutions. The results indicate that there seems to be no significant correlation between program impacts and the unemployment rate. Medium-term impacts may be slightly negatively correlated with GDP growth. Labor market institutions such as employment protection legislation and the replacement rate seem to play no role in determining ALMP effectiveness. Instead, the program type matters: Job Search Assistance programs tend to bring about significant short-term impacts, while longer-term impacts are significantly more likely brought about by training programs and private sector incentive schemes. Youth programs consistently show negative effects.

Jochen Kluve
Humboldt-Universität zu Berlin and RWI
School of Business and Economics
Spandauer Str. 1
10178 Berlin, Germany
jochen.kluve@hu-berlin.de

1. Introduction

Over the last decades countries in the OECD have used active labor market programs (ALMP) in their effort to reduce unemployment and, more generally, to increase the labor market performance of unemployed or low skilled workers. Active labor market programs are typically classified into four main categories, labor market training, private sector employment, public sector employment, and job search assistance. Over the last decade, in particular, the design of the ALMP portfolio in OECD countries has been increasingly closely connected with the passive support system as part of countries' "activation strategies" (OECD 2007). This development implies that benefit sanction elements (in case of non-compliance with job search requirements) or compulsory ALMP participation (after a certain length of the unemployment spell) may be applied.

The effectiveness of active labor market programs has been controversial since their first implementation (in the US in the 19040s). Figure 1 illustrates that at least since the 1980s many OECD countries have been using ALMP on a relevant scale. Research on program effectiveness has been somewhat lagged relative to the time pattern of their implementation, but as quality and size of (administrative) data sets and econometric methods – in particular for non-experimental studies – have improved (Heckman et al. 1999), the body of available evidence has been continuously growing over the last 20 years.

< Figure 1 about here >

In addition, therefore, to impact analyses of particular programs, several studies have been conducted that summarize the findings from individual program evaluations and that intend to detect systematic patterns in ALMP effectiveness across countries and program types. The OCED has been particularly active in reviewing member states' experience (e.g. Martin and Grubb 2001) and regularly updates OECD knowledge on ALMP use and effectiveness in its Employment Outlook series. Heckman et al. (1999) provide a comprehensive overview of the methodology of program evaluation along with a collection and review of program evaluation studies implemented before the late 1990s.

More recently, meta analyses of the effectiveness of ALMP have provided a systematic assessment of program impacts. Greenberg et al. (2003) study 31 evaluations of government-funded programs for the disadvantaged in the US. Kluve (2010) analyzes programs in Europe, compiling 137 program impact estimates in an evaluations database. Card et al. (2010) use a new and comprehensive sample of 97 studies and 199 impact estimates – the large majority coming from OECD countries.[1]

The objective of these meta-analyses is to detect quantitative, systematic patterns in program effectiveness by correlating a measure of program impact with a set of explanatory variables including e.g. program type, target group characteristics, evaluation methodology, etc. Ideally, the measure of program impact would be an effect size estimate (as used in meta-analyses in other fields such as e.g. epidemiology). Due to the heterogeneity of data and methods used in the evaluation of ALMP across countries, however, this can be done only for a small part of the available studies (Card et al. 2010). Hence, meta-analyses of ALMP have focused on correlating a trinomial measure of program effectiveness (indicating whether the impact estimate is significantly positive, significantly negative, or not significantly different from zero) with study and program characteristics.

As the worldwide economic crisis has affected OECD countries over recent years, there has been a renewed interest in the question of ALMP effectiveness and their potential role in combating rising numbers of unemployed workers. While there have been analyses of ALMP patterns in relation to the unemployment rate for particular countries (Lechner and Wunsch 2009 for Germany) and across countries (as part of the meta-analysis in Kluve 2010), further knowledge on the effectiveness of ALMP over the business cycle would clearly be useful. Lechner and Wunsch (2009) find a clear positive correlation between program effectiveness and the unemployment rate, Kluve (2010) also finds indications of such a correlation.

[1] The overlap between the analysis in Kluve (2010) and Card et al. (2010) is 37 studies. The former analysis contains evaluation studies until around 2002/2003, the latter until 2007.

This paper tries to add further insight to this question by augmenting the comprehensive meta data base previously analyzed in Card et al. (2010) with business cycle and labor market indicators. Card et al. (2010) focus on program type, program characteristics, evaluation method and target group. The subsequent analysis adjusts this focus, constructing a new data base that combines individual program evaluation data with data on GDP growth, unemployment rate, ALMP spending, strictness of Employment Protection Legislation (EPL), and the replacement rate. These indicators are taken from OECD statistics (stats.oecd.org) and they are combined with the individual evaluations on a country-time-basis, i.e. in each case they are measured at the specific point in time (or time period) when the corresponding active program was implemented.

While not being able to analyze the role of ALMP during the most recent crisis (since a sizeable body of evidence on programs implemented during the crisis is still to come), the paper intends to shed further light on the interplay between ALMP effects and the cycle. Clearly, meta analysis synthesizes heterogeneous information and can only utilize a limited set of explanatory variables. At the same time, the potential to quantitatively analyze and detect systematic patterns makes this type of analysis a promising exercise. Section 2 briefly reviews the type of ALMPs we are interested in, and section 3 discusses the meta-analytical method and data collection. Section 4 has some first results, section 5 concludes.

2. Types of active labor market programs

Active labor market programs for the unemployed are commonly classified into four types, as suggested and used by e.g. the OECD, Eurostat and in the program evaluation literature.

The first program type, **(labor market) training**, encompasses programs like classroom training, on-the-job training and work experience. The interventions can either provide a more general education (including all types of basic courses) or specific vocational skills (courses providing e.g. technical and manufactural skills). The main objective of programs is to enhance the productivity and employability of the participants and to enhance human

capital by increasing skills. Training programs can therefore be seen as the "classic" active labor market policy. They constitute the program type that is most frequently implemented worldwide (Betcherman et al. 2004, Card et al. 2010).

Second, **private sector incentive programs** comprise all interventions aimed at creating incentives that alter employer and/or worker behavior regarding private sector employment. The most prominent program in this category – in OECD countries especially – is a wage subsidy. The objective of subsidies is to encourage employers to hire new workers or to maintain jobs that would otherwise be broken up. These subsidies can either be direct wage subsidies to employers or financial incentives to workers for a limited period of time. They frequently target long-term unemployed and more disadvantaged individuals. Another type of subsidized private sector employment is self-employment assistance: Unemployed individuals who start their own business will receive grants or loans and sometimes also advisory support for a fixed period of time. Such entrepreneurship programs that combine financial support and training have been increasingly used in emerging economies and developing countries, often with a larger emphasis on the training component relative to the grant/loan component. Technical training for self-employment may include business skills (e.g. mentoring or bookkeeping), literacy and life skills.

In contrast to private sector subsidies, the third active labor market program type, **direct employment programs in the public sector,** focuses on the direct creation and provision of public works or other activities that produce public goods or services. These measures are typically targeted at the most disadvantaged individuals, pursuing the aim to keep them in contact with the labor market and preclude loss of human capital during a period of unemployment. Nevertheless, the created jobs are often additionally generated jobs not close to the actual labor market.

The fourth type of program, **Services and Sanctions**, encompasses all measures aimed at enhancing job search efficiency. This definition is used e.g. in Kluve (2010) and Card et al. (2010) and constitutes a slight re-definition of the standard "Job Search Assistance" category, mainly by including sanctions. The set of interventions typically combined in this

category – job search courses, job clubs, vocational guidance, counseling and monitoring, and sanctions in the case of noncompliance with job search requirements – share a common objective, as all are geared towards increasing the efficiency of the job matching process. While these services may in principle be provided by either public or private providers, public services prevail across countries. The job search assistance programs are usually the least expensive in the ALMP portfolio. Benefit sanctions (e.g. reduction of unemployment benefits) are now imposed in most OECD countries if the monitored job search behavior of an unemployed is not sufficient or if she refuses an acceptable job offer (e.g. OECD 2007).

Figure 1 (above) illustrates the pattern of spending on ALMP (measured as per cent of GDP) in OECD countries, summarizing over these four categories. One can observe a generally decreasing trend over time, with a notable increase across countries in 2009 as the crisis begins.

3. Meta analysis of program evaluations using cycle indicators

3.1 Method

Meta-analysis is a statistical tool for synthesizing research findings across a set of individual studies that all analyze the same or a similar issue, in the same or a comparable way. Essentially, it consists of procedures for extracting empirical results and other information from these individual studies, assembling this information into a database, and then analyzing the resulting data using modified versions of standard statistical methods (Greenberg, Michalopoulos and Robins 2003).

Meta-analysis has its origin in health care analysis (cf. *The Cochrane Collaboration*, www.cochrane.org), where it is usually used to generate robust evidence on the effectiveness of certain clinical interventions by aggregating data from a set of clinical trials on the same drug, all of which were ideally subject to the same laboratory conditions. Whereas randomized clinical trials generally produce reliable results by virtue of their study design, sample sizes of these randomized trials are often small. Hence, meta-analysis is useful since

it generates more precise treatment effect estimates due to larger sample sizes.

Meta-analysis is also used in several fields of the social sciences (cf. *The Campbell Collaboration*, www.campbellcollaboration.org). While empirical evidence in the social sciences often originates from much larger samples than those common in health care research, it is much less frequently based on randomized experiments, not to mention several identical randomized trials conducted in different places. Hence, in addition to improving upon single-study estimates of the effectiveness of similar (rather than identical) treatments administered in similar (rather than identical) environments, meta-analysis in the social sciences can also investigate the role of covariates, i.e. learning about the influence of surrounding factors in treatment effectiveness.

While being relatively new to economics, meta-analyses have already been used extensively in the context of environmental economics (van den Bergh, Button, Nijkamp and Pepping 1997) and for analyzing issues as diverse as, for instance, tests of the Lucas critique and the gender wage gap (see the overview in Stanley 2001). Prominent examples in the labor economics literature include the minimum wage analysis by Card and Krueger (1995) and the meta study on estimates of the return to education by Ashenfelter, Harmon and Oosterbeek (1999). Greenberg, Michalopoulos and Robins (2003) synthesize findings from 31 evaluations of 15 government-funded training programs for the disadvantaged in the US. Focusing on earnings as the outcome, they find that treatment effects were largest for women, modest for men, and negligible for youths. They also find that skills training was apparently effective, while basic education was not, and that despite three decades of experience in running training programs in the US, programs do not appear to have become more effective over time.

The discussion on ALMP effectiveness in OECD countries started with so-called “narrative” literature reviews. Martin (2000) and Martin and Grubb (2001), for instance, provide important narrative overviews of OECD countries' experience with active labor market programs. Heckman, LaLonde and Smith (1999, Table 25) were the first to systematically collect a list of European evaluation studies, including information on impact estimates and

estimation method, but did not conduct a statistical analysis on the – quite limited – sample. Kluve and Schmidt (2002, Table 2) augmented this set of studies with program evaluations conducted since the collection by Heckman, LaLonde and Smith, and proceed to implement a first – rather basic – quantitative analysis. The first ALMP meta-analysis on a reasonably sized sample is conducted in Kluve (2010) and finds that program effectiveness is almost exclusively correlated with program type: training programs are modestly effective, private sector employment schemes and Job Search Assistance typically show very positive effects, while public sector employment is detrimental to participants' post-treatment employment performance.

3.2 Data

The core first step in conducting a meta-analysis consists of the appropriate procedure for extracting empirical findings and other information from individual studies. That is, the collection of the set of studies on which the analysis will be performed. This collection follows a so-called "protocol" (Higgins and Green 2005). The data used here are based on the meta-data used in Card et al. (2010) and collected using a survey among Fellows of IZA (Institute for the Study of Labor, Bonn, Germany) and Affiliates of the NBER Labor Studies program. Details of the data collection process are explained in Card et al. (2010).

This data set consisting of 199 individual program estimates is then augmented using OECD indicators for GDP growth, unemployment rate, ALMP spending (as % of GDP), EPL strictness (the OECD's composite indicator), and the replacement rate. Figures 2-4 illustrate some patterns over time. Figure 2, for instance, displays the development of passive spending, essentially a function of the replacement rate and unemployment. The graph indicates a declining trend over time for all countries (most likely representing the move towards "activation" strategies, see above and OECD 2007), that then suddenly increases as unemployment rises at the onset of the crisis. This underlying crisis pattern of unemployment can then be observed in Figure 3. The graph also shows that unemployment rates have been oscillating strongly in many countries over the recent decades. Finally, Figure 4 depicts the time trend in annual growth rates of GDP, showing the very pronounced contraction in 2008/2009.

< Figures 2, 3, 4 about here >

All indicators that are merged with the program evaluation data are always measured at the point in time when the corresponding program was implemented. The resulting data comprise 187 observations (a few observations are dropped because they evaluate programs in non-OECD countries). Table 1 presents summary statistics, categorizing the explanatory variables in three groups, cycle indicators, labor market institutions, and program characteristics. These covariates will then be correlated with the estimated program effect (positive, negative, insignificant) to investigate systematic patterns.

< Table 1 about here >

4. Results

Tables 2 and 3 present results of the meta regression correlating the trinomial indicator of program effectiveness with the above described indicators. The meta data allow distinguishing between short-term impacts (the effect estimate for the first 12 months post-treatment) and medium-term impacts (the effect for months 12-24 post-treatment). For the latter, 98 impact estimates are available (Table 3).

< Tables 2, 3 about here >

The initial results shown in Table 2 display some interesting patterns. The “raw” correlation (panel i) found between program effectiveness and the cycle indicators (positive for GDP growth and negative for the unemployment rate) disappears in the specification with all covariates (panel v). Equally noticeable seems to be that labor market institutions – as measured by ALMP spending, an index of EPL strictness and the replacement rate – show very little correlation with program effectiveness (panels ii, iii, v). Instead, the last set of indicators covering program characteristics show stronger patterns. Relative to the base category (public sector employment), job search assistance programs seem significantly

more likely to effectuate short-term impacts, while this is not the case for training and private sector incentive schemes. Even more pronounced is the finding that programs targeting youths are significantly correlated with negative program impacts, a result already found e.g. in Kluve (2010) and other reviews of OECD youth programs.[2] Moreover, programs with long durations (defined as 9 months or longer) seem to bring about negative rather than positive effects.

Looking at medium-term impacts (Table 3), the picture changes somewhat. There is some indication that GDP growth may be negatively correlated with medium-term impacts of ALMP. As regards labor market institutions, also for the longer-term outcome there are no significant correlations found. Looking at the program types, it is interesting to note that the significant positive correlation of job search assistance programs and program effectiveness disappears, and that training and wage subsidies seem to be the programs that are more effective in the longer run. This observation points to a pattern increasingly observed in recent program evaluation studies (e.g. Hotz et al. 2006, Lechner et al. 2011): Job Search Assistance may be the most effective program type in the short-run, bringing about good results fast in the early weeks and months of the unemployment spell. Significant long-run effects, however, are more likely brought about by more intensive investments e.g. in training programs. In line with this argument, the previously negative coefficient on the "long duration" dummy becomes insignificant (and changes signs). Youth programs, unfortunately, seem to be ineffective also with respect to medium-term outcomes.

5. Conclusion

This paper presents an initial analysis of the relation between ALMP effectiveness and the business cycle across OECD countries. The analysis is based on a data set combining 187 particular program evaluations with indicators for the business cycle and labor market

[2] The generally bleak performance of youth programs across OECD countries is not found in other regions of the world, most notably Latin America and the Caribbean (LAC). There, evaluations of youth programs typically find positive impacts (Ibarrarán and Rosas 2009, Urzúa and Puentes 2010).

institutions. The results indicate that there seems to be no significant correlation between program impacts and the unemployment rate. Medium-term impacts may be slightly negatively correlated with GDP growth. Labor market institutions such as employment protection legislation and the replacement rate seem to play no role in determining ALMP effectiveness. Instead, the program type matters: Job Search Assistance programs tend to bring about significant short-term impacts, while longer-term impacts are significantly more likely brought about by training programs and private sector incentive schemes. Youth programs consistently show negative effects.

References

Ashenfelter, O., C. Harmon and H. Oosterbeek (2000) A Review of Estimates of the Schooling /Earnings Relationship, With Tests for Publication Bias. Labour Economics

Betcherman, G., K. Olivas and A. Dar (2004), "Impacts of Active Labor Market Programs: New Evidence from Evaluations with Particular Attention to Developing and Transition Countries", Social Protection Discussion Paper Series 0402, Washington, D.C.: World Bank.

Card, D., J. Kluve and A. Weber (2010) "Active Labour Market Policy Evaluations: A Meta-analysis", The Economic Journal 120, F452-F477.

Card, D. and A.B. Krueger, 1995. Time-Series Minimum Wage Studies: A Meta-Analysis. American Economic Review (Papers and Proceedings) 85, 238-243.

Greenberg, D.H., C. Michalopoulos and P.K.Robins (2003). A Meta-Analysis of Government-Sponsored Training Programs. *Industrial and Labor Relations Review* 57 (1): 31-53.

Heckman, J.J., R.J. LaLonde and J.A. Smith (1999) , The economics and econometrics of active labour market programs. In: Ashenfelter, O., Card, D. (Eds.). *Handbook of Labor Economics* 3. Elsevier, Amsterdam.

Higgins, J.P.T., Green, S. (Eds.), 2005. Cochrane Handbook for Systematic Reviews of Interventions 4.2.5 [updated May 2005]. In: The Cochrane Library, Issue 3. John Wiley & Sons: Chichester, UK.

Hotz, V.J., G.W. Imbens, and J.A. Klerman (2006), Evaluating the Differential Effects of Alternative Welfare-to-Work Training Components: A Reanalysis of the California GAIN Program, *Journal of Labor Economics* 24, 521-566.

Ibarraran, P. and D. Rosas (2009), Evaluating the Impact of Job Training Programs in Latin America: Evidence from IDB funded operations", *Journal of Development Effectiveness* 1 (2), 195-216.

Kluve, J. (2010) "The effectiveness of European active labor market programs", Labour Economics 17, 904-918.

Kluve, J., H. Schneider, A. Uhlendorff, and Z. Zhao (2011) "Evaluating continuous training programs using the Generalized Propensity score", Journal of the Royal Statistical Society Series A, forthcoming.

Lechner, M., Miquel, R. and C. Wunsch (2011), Long-Run Effects of Public Sector Sponsored Training in West Germany, Journal of the European Economic Association, forthcoming.

Lechner, M. and C. Wunsch (2009), Are training programs more effective when unemployment is high?, Journal of Labor Economics 27.

Martin, J.P., 2000. What Works among Labor Market Policies: Evidence from OECD Countries' Experiences. OECD Economic Studies 30.

Martin, J.P. and D. Grubb (2001), "What works and for whom: a review of OECD countries' experiences with active labour market policies", Swedish Economic Policy Review 8, 9-56.

OECD (2007), "Activating the unemployed: what countries do", Chapter 5 in OECD Employment Outlook, OECD: Paris.

OECD (2010), OECD Employment Outlook 2010, Paris.

OECD (2011), OECD Employment Outlook 2011, Paris.

Scarpetta, S., A. Sonnet, and T. Manfredi (2010), "Rising Youth Unemployment During The Crisis – How to prevent negative long-term consequences on a generation?", OECD Social, Employment and Migration Working Papers No. 106, OECD Publishing: Paris.

Stanley T.D. (2001). Wheat From Chaff: Meta-Analysis As Quantitative Literature Review. Journal of Economic Perspectives 15 (3):131-150.

Urzúa, S. and E. Puentes (2010), La evidencia del impacto de los programas de capacitación en el desempeño en el mercado laboral, Banco Interamericano de Desarrollo – Unidad de Mercados Laborales del Sector Social, Notas Técnicas #268, BID: Washington, DC.

Van den Bergh, J.C.J.M., K.J. Button, P. Nijkamp and G.C. Pepping (1997). Meta –Analysis in Environmental Economics. Dordrecht: Kluwer Academic Publishers.

Table 1. Summary statistics

	Mean / Fraction	SD	Min	Max
Cycle indicators				
GDP growth	2.68	1.39	-1.63	5.67
Unemployment rate	7.42	2.82	2.06	14.9
Labor market institutions				
ALMP spending	1.10	0.60	0.18	3
EPL index	2.13	0.86	0.2	3.7
Replacement rate	32.43	13.68	5.9	63.7
Program indicators				
Training	0.40			
Job Search Assistance	0.12			
Private sector employment	0.15			
Youth program	0.14			
Short program	0.21			
Long program	0.18			
Main countries				
Denmark	0.13			
Germany	0.23			
Austria	0.07			
France	0.07			
Sweden	0.10			
N=187				

Table 2. Correlates of ALMP effectiveness: Short-term impact

	(i)				(ii)				(iii)				(iv)				(v)			
	Negative outcome		Positive outcome		Negative outcome		Positive outcome		Negative outcome		Positive outcome		Negative outcome		Positive outcome		Negative outcome		Positive outcome	
	Marg. effect	t-stat	Marg. effect	t-stat	Marg. effect	t-stat	Marg. effect	t-stat	Marg. effect	t-stat	Marg. effect	t-stat	Marg. effect	t-stat	Marg. effect	t-stat	Marg. effect	t-stat	Marg. effect	t-stat
Cycle indicators																				
GDP growth	-0.0513	-1.97	0.0574	2					-0.0409	-1.39	0.0458	1.41					-0.0350	-1.09	0.0395	1.09
Unemployment rate	0.0247	2.05	-0.0277	-2.09					0.0183	1.25	-0.0204	-1.27					0.0092	0.64	-0.0104	-0.64
Labor market institutions																				
ALMP spending					0.1000	1.34	-0.1126	-1.34	0.0493	0.59	-0.0553	-0.59					0.0605	0.75	-0.0683	-0.76
EPL index					0.0454	0.98	-0.0511	-0.99	0.0216	0.52	-0.0242	-0.52					-0.0082	-0.17	0.0093	0.17
Replacement rate					-0.0038	-1.41	0.0043	1.4	-0.0018	-0.51	0.0020	0.51					-0.0026	-0.77	0.0029	0.77
Program indicators																				
Training													0.0468	0.59	-0.0540	-0.59	0.0393	0.44	-0.0440	-0.44
Job Search Assistance													-0.1625	-2.23	0.2286	1.89	-0.1346	-1.57	0.1752	1.38
Private sector employment													-0.0144	-0.14	0.0170	0.14	0.0174	0.15	-0.0194	-0.16
Youth program													0.2616	2.11	-0.2411	-2.65	0.3219	2.62	-0.2768	-3.37
Short program													-0.0241	-0.33	0.0287	0.33	-0.0136	-0.18	0.0156	0.17
Long program													0.1761	1.69	-0.1767	-1.97	0.1727	1.41	-0.1689	-1.65
N=174																				

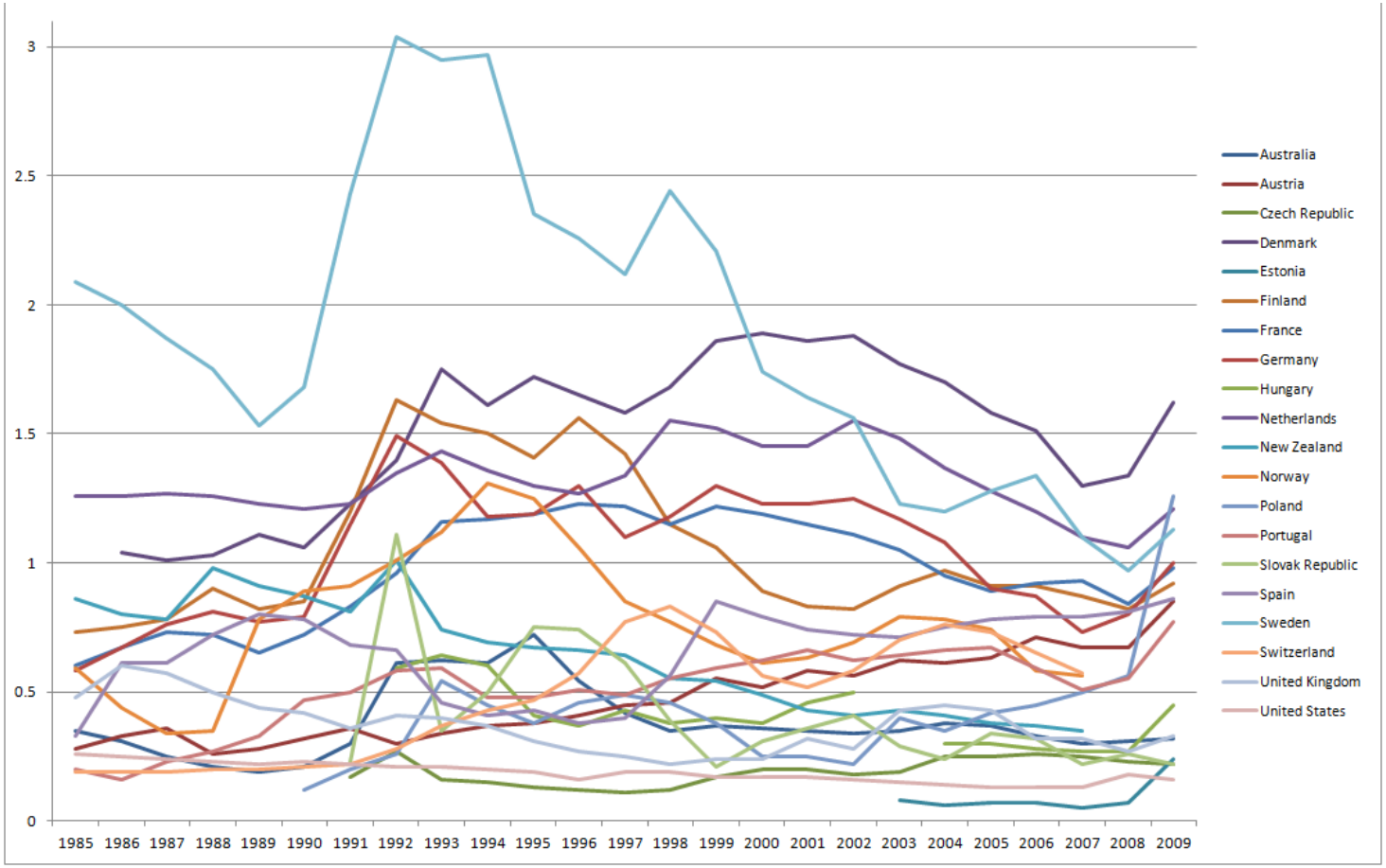
Notes: Marginal effects of an ordered probit regression for the trinomial outcome “negative treatment estimate” (-1), “insignificant”, “positive treatment estimate” (1). Standard errors are clustered by study.

Table 3. Correlates of ALMP effectiveness: Medium-term impact

	(i)				(ii)				(iii)				(iv)				(v)			
	Negative outcome		Positive outcome		Negative outcome		Positive outcome		Negative outcome		Positive outcome		Negative outcome		Positive outcome		Negative outcome		Positive outcome	
	Marg. effect	t-stat	Marg. effect	t-stat	Marg. effect	t-stat	Marg. effect	t-stat	Marg. effect	t-stat	Marg. effect	t-stat	Marg. effect	t-stat	Marg. effect	t-stat	Marg. effect	t-stat	Marg. effect	t-stat
Cycle indicators																				
GDP growth	0.0075	0.46	-0.0162	-0.45					0.0371	1.94	-0.0880	-1.96					0.0299	1.75	-0.0788	-1.66
Unemployment rate	0.0135	1.64	-0.0291	-1.84					0.0092	1.06	-0.0217	-1.16					0.0102	1.33	-0.0269	-1.47
Labor market institutions																				
ALMP spending					0.0855	2.32	-0.1909	-2.31	0.0866	2.06	-0.2053	-2.13					0.0588	1.46	-0.1548	-1.48
EPL index					-0.0101	-0.36	0.0225	0.35	0.0238	0.93	-0.0563	-0.94					0.0233	1	-0.0614	-0.98
Replacement rate					-0.0014	-0.67	0.0031	0.69	-0.0010	-0.5	0.0024	0.49					-0.0005	-0.26	0.0014	0.26
Program indicators																				
Training													-0.1178	-2.19	0.2856	2.99	-0.0702	-1.42	0.1813	1.76
Job Search Assistance													-0.0699	-1.85	0.2628	1.45	-0.0462	-0.95	0.1538	0.81
Private sector employment													-0.0587	-1.3	0.1987	1.12	-0.0768	-1.9	0.3021	1.72
Youth program													0.0972	1.41	-0.1926	-1.73	0.1068	1.53	-0.2060	-1.86
Short program													-0.0177	-0.36	0.0484	0.35	-0.0235	-0.47	0.0667	0.45
Long program													-0.0367	-0.99	0.1045	0.93	-0.0261	-0.54	0.0737	0.52
N=98																				

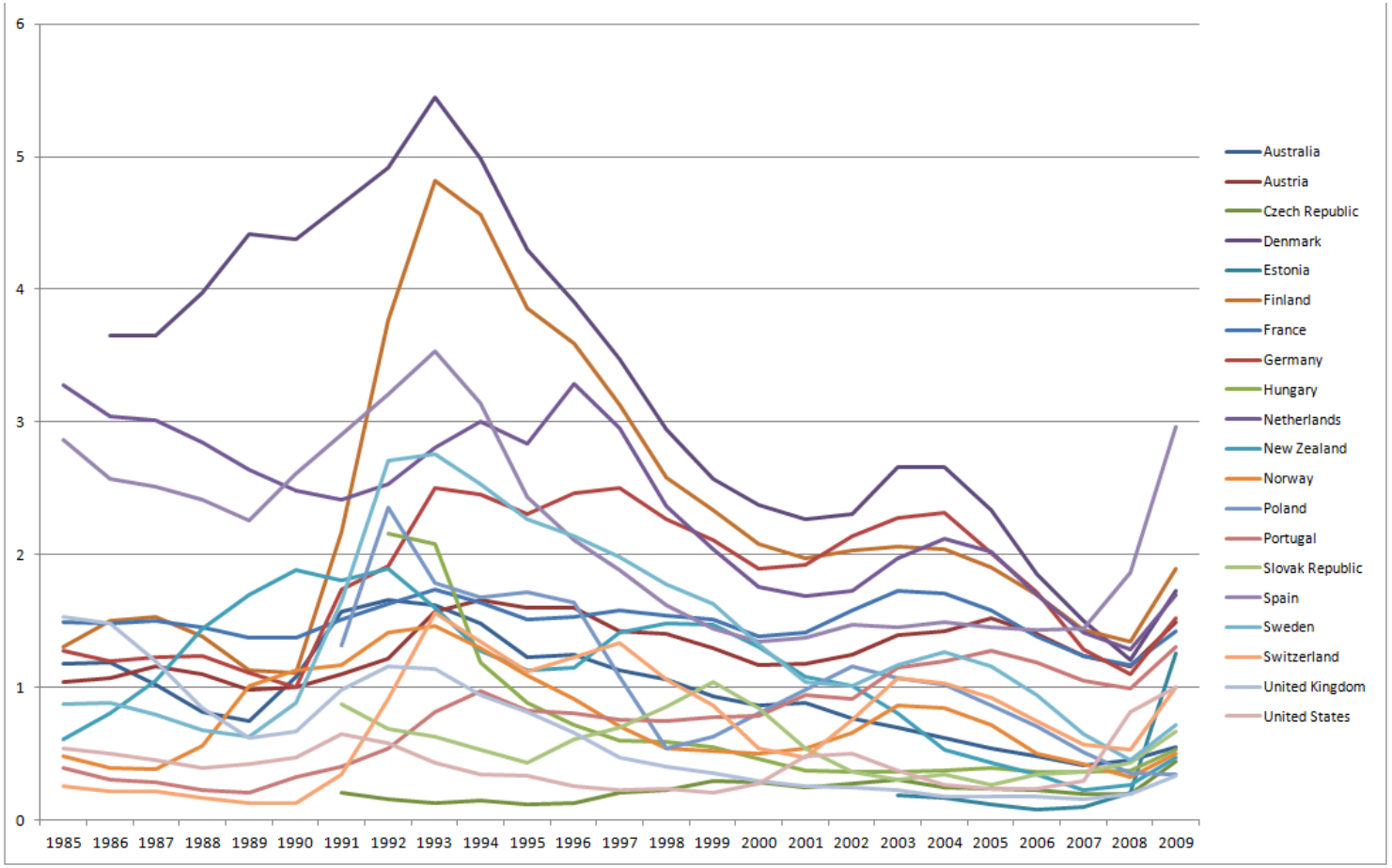
Notes: Marginal effects of an ordered probit regression for the trinomial outcome “negative treatment estimate” (-1), “insignificant”, “positive treatment estimate” (1). Standard errors are clustered by study.

Figure 1. Spending on ALMP in OECD countries, 1985-2009



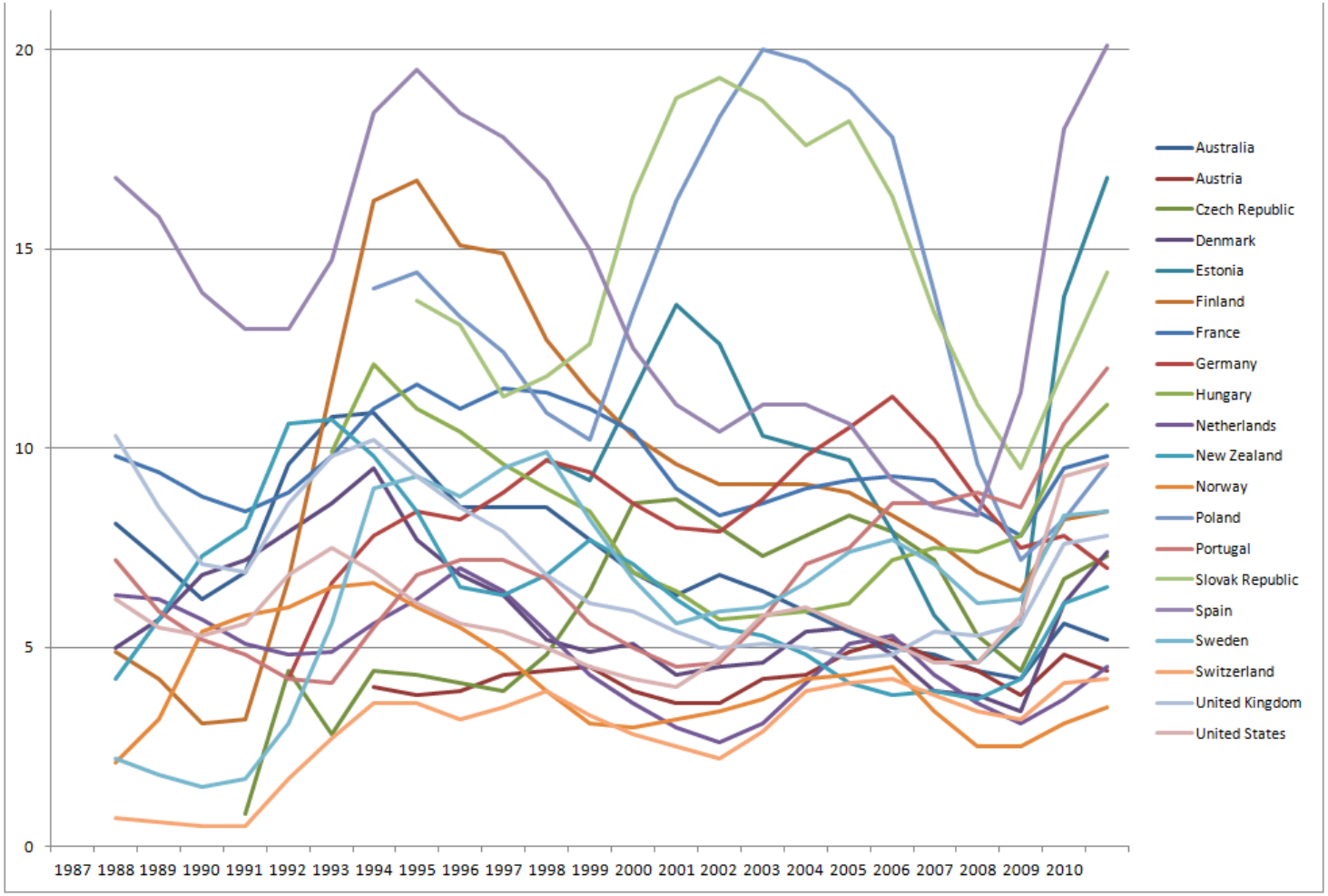
Source: OECD statistics website, stats.oecd.org

Figure 2. Spending on passive measures in OECD countries, 1985-2009



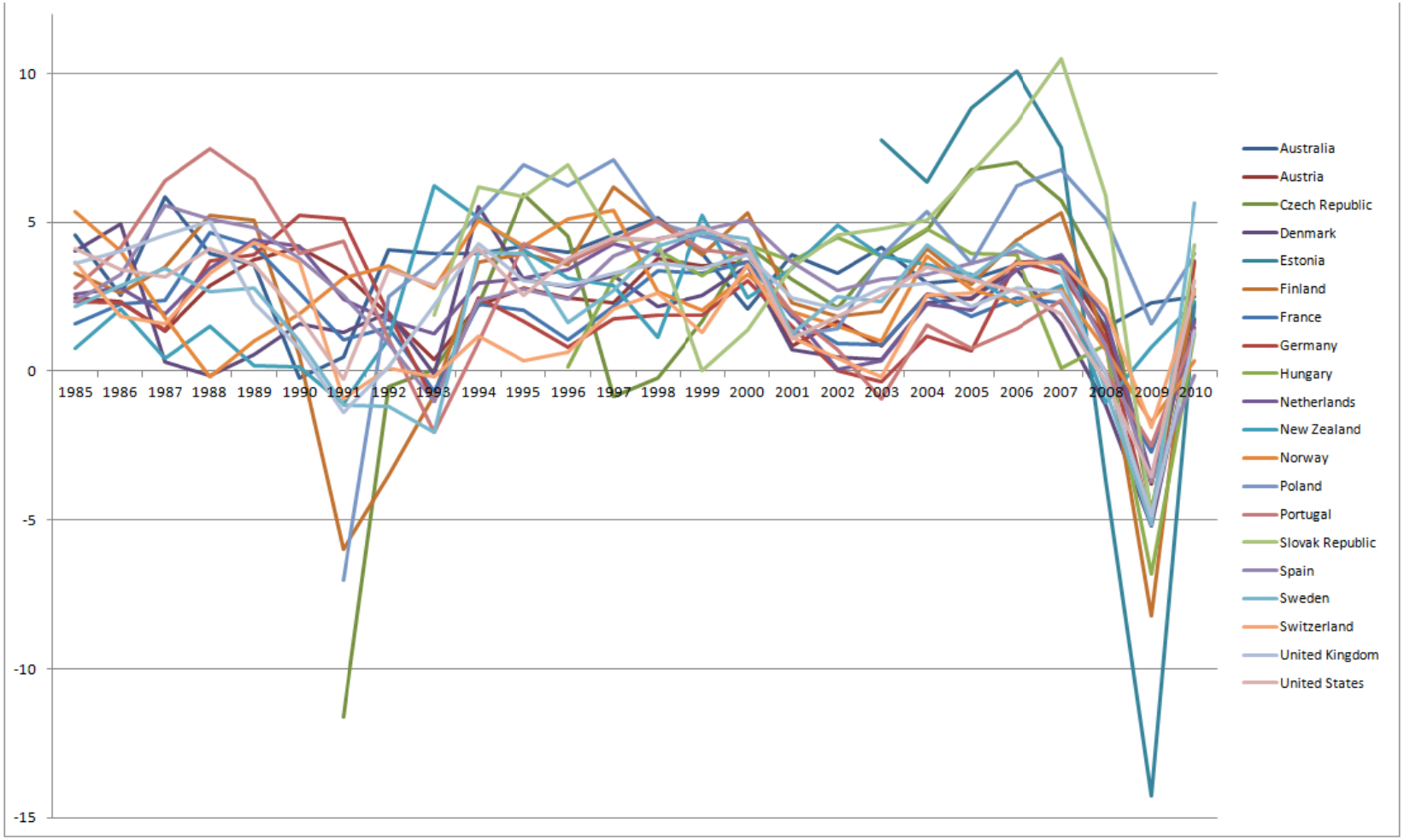
Source: OECD statistics website, stats.oecd.org

Figure 3. Unemployment rates in OECD countries, 1987-2010



Source: OECD statistics website, stats.oecd.org

Figure 4. Annual GDP growth rates in OECD countries, 1985-2010



Source: OECD statistics website, stats.oecd.org