



Analysis of costs and benefits of active compared to passive measures

Final report

Client: European Commission, DG Employment, Social Affairs and Inclusion



Rotterdam, 29 March 2012

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Rotterdam, 29 March 2012

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Preface

This publication is supported by the European Union's Programme for Employment and Social Solidarity - PROGRESS (2007-2013).

This programme is managed by the Directorate-General for Employment, social affairs and equal opportunities of the European Commission. It was established to financially support the implementation of the objectives of the European Union in the employment and social affairs area, as set out in the Social Agenda, and thereby contribute to the achievement of the Lisbon Strategy goals in these fields.

The seven-year Programme targets all stakeholders who can help shape the development of appropriate and effective employment and social legislation and policies, across the EU-27, EFTA-EEA and EU candidate and pre-candidate countries. PROGRESS mission is to strengthen the EU contribution in support of Member States' commitment. PROGRESS will be instrumental in:

- providing analysis and policy advice on PROGRESS policy areas;
- monitoring and reporting on the implementation of EU legislation and policies;
- in PROGRESS policy areas;
- promoting policy transfer, learning and support among Member States on EU;
- objectives and priorities; and
- relaying the views of the stakeholders and society at large.

For more information see: <http://ec.europa.eu/progress>.

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Introduction

Context and aim of the study

In reaction to the crisis that started in 2008, the European Commission proposed in November 2008 a major Recovery Plan, calling to protect and create jobs and speeding up the availability of European funds for active labour market policies.¹ During the crisis of 2008/2009, unemployment rose in all advanced economies with the exception of Germany.² An expected implication of increasing unemployment was that expenditures on passive measures also increased during the crisis, putting a stress on insurance funds and government budgets.

Besides the necessity to adopt crisis measures, an exit strategy needs to be formulated to reduce the strain of passive measures on budgets and achieve the best mix of passive and active measures. New trends such as the ageing workforce, increasing female labour market participation and an increasing share of temporary work offer new challenges and opportunities. Depending on the root causes and the phase of the crisis and recovery, different labour market policies may be called for in different Member States.

The present study therefore analyses the use of active and passive labour market policies (LMPs) over the last two decades (since 1990) with special attention to cyclical effects, costs and benefits of such measures and the policy response to the current crisis. The insights gained by this study are to be used for the formulation of labour market policies in the framework of the Europe 2020 Strategy and the exit strategy from the crisis.

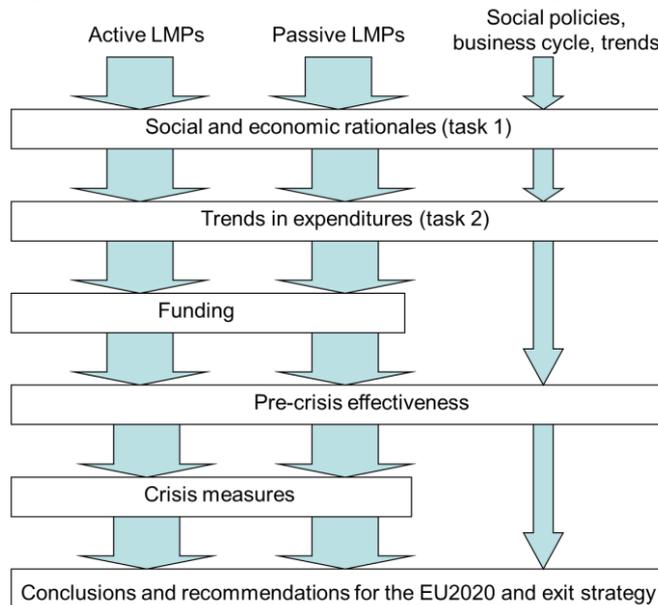
Approach to the study

The study has been divided into six tasks which are presented in the next figure. In this introduction we briefly describe the general approach to each task. The tasks concern active as well as passive policies, and sometimes social policies in general, the business cycle and other specific relevant trends. In the remainder of the report, each chapter is devoted to one of these tasks, and the approach is outlined in more detail at the start of each chapter.

¹ European Commission, Document reference: IP/08/1771 Date: 26/11/2008.

² OECD Economic Outlook 2010 and IMF World Economic Outlook 2010.

Figure Overview of the study – tasks and their coverage



Task 1 consists of making an overview of rationales and theoretical impacts of active and passive policies. The theoretical impacts of active and passive policies can reach beyond the rationales or objectives foreseen by policy makers. For example policy rationales for unemployment benefits and unemployment assistance include the insurance of income and the guarantee of a minimum income. These benefits may affect wage costs, and indirectly the competitiveness of a country. In turn, benefits act as a stabilizer of national consumer demand. Therefore not only statements of policy rationales but also economic literature on the passive and active measures has been included for the inventory and discussion of rationales and theoretical impacts.

The purpose of task 2 is to describe and discuss trends in public expenditures on active and passive measures. To this end Eurostat data (LMP database) on expenditures since 1997/1998 have been augmented with OECD data for 1985-1998. We show the trends and indicate how these are related to the business cycle. We also review the differences in trends between five groups of countries and major underlying developments, for example the integration of active and passive measures in some countries by incorporating activating elements into passive measures.

The purpose of task 3 is to provide an overview of the origin of funding and of the main institutions responsible for the delivery of key labour market measures in the EU and to discuss implications of different funding mechanisms. The data on funding and main institutions were obtained from the Eurostat LMP database. Differences in funding and responsibility between countries are explained in relation to institutional settings. Finally we draw conclusions on the alignment of funding and responsibilities based on theoretical insights and a discussion meeting between national experts representing the five different groups of countries.

To analyse the effectiveness of active and passive measures in task 4, the measures have been analysed for selected countries. Several studies have reviewed the evidence on the effects of these measures. However, many of the research on which such studies are based, only take into account a limited number of the pitfalls evaluators face when assessing the benefits of programmes. Few adequately address such issues as deadweight, substitution and displacement. Again fewer studies are based on an experimental design and are able to properly measure the 'average treatment effect of the treated'. For the present study we have therefore chosen to identify and examine only studies that meet high standards of evaluation analysis. This approach aims to deal with the

conflicting results obtained from other meta studies and a more in-depth qualification and explanation of findings. National experts of 10 countries have presented a literature overview of evaluation studies for all measures, and have indicated which are of high quality. From these, 20 well evaluated measures in 10 Member States have been selected. This approach ensured the inclusion of evaluation studies in the national language.

The key issue for the assessment of the selected policies is their effectiveness. Effectiveness determines the benefits of a measure, but also its indirect costs, which may arise, for example, from crowding-out effects: persons not treated by the measure are substituted with people treated by the measure. Knowledge on costs and benefits is indispensable for an assessment of funding, efficiency and cost-effectiveness. To our knowledge this is the first study that systematically indicates the inclusion of substitution effects, although this does not mean there is much evidence on these effects.

Therefore, the study focuses on what knowledge is available about the effectiveness of policy instruments. This is done in a sophisticated manner, since existing studies hardly ever will come to concurring conclusions. The challenge consists of finding out the piece of truth that is contained in each of the contradicting studies. This requires a set of criteria for assessing the reliability of findings. In the first place, this has to do with empirical methods for identifying the causal impact of policy instruments. The quality of impact identification may vary heavily, depending on the method chosen for empirical analysis. Assessing evaluation studies closely we seek to explain differences in estimated effectiveness to draw conclusions first for the specific measure in the specific country, and then to indicate what conclusions could be generalized based on overview literature.

Besides the authors, the following persons have contributed to Chapter 4: Lennart Flood (University of Gothenburg, Sweden), Mike Brewer (Institute for Fiscal Studies, UK), Elish Kelly and Philip J. O'Connell (Economic and Social Research Institute, Ireland), René Böheim (Johannes Kepler University, Austria), Raul Ramos (University of Barcelona, Spain), Luca Nunziata (University of Padua, Italy), Marek Góra (Warsaw School of Economics, Poland) and Ágota Scharle (Budapest Institute, Hungary).

For task 5 on recent crisis related policies, literature documenting such policies has been reviewed. In addition, Eurostat expenditure data for 2009 have been analysed to appreciate the magnitude of the policy changes. Per type of measure, we identify the common elements that many countries share and the motivations for those measures. In the short-run, such measures have an impact on the protection of income and financial requirements of budgets or funds. In the longer run, other trends besides the current crisis will influence the impact of the measures, for example the ageing of the labour force. The potential effectiveness of recent policies is discussed in the light of such trends and findings from the preceding tasks.

The purpose of task 6 is to draw policy conclusions on the composition of active and passive labour market policies in the context of the new EU2020 strategy and the exit strategy from the crisis. To achieve this purpose, we have drafted conclusions on the preceding tasks and organized a meeting with national experts from the various parts of Europe, with the aim of taking the partial conclusions to a strategic level. Based on the findings and the outcome of this meeting we discuss the priorities, pitfalls and timing of the implementation of a mix of active and passive measures in the next ten years. But also, gaps in knowledge about the effectiveness of measures are indicated in the final chapter, as well as their implications for the design of future policy measures and future research.

1 Rationales of active and passive labour market measures

1.1 Introduction

The key questions addressed in this chapter are:

1. What are the economic and social rationales for active and passive measures?
2. What is the underlying view on the responsibilities of the State and the individual?
3. To which challenges are active and passive measures expected to respond?
4. What are the target groups of the measures?
5. What are the theoretical impacts of labour market policies on the level of (wage) cost and hence the competitiveness in the global division of labour?
6. How is social equity addressed by the level, duration and targeting of the measures?
7. How does the formulation of rationales respond to current developments such as the financial crisis, continued globalization, an ageing labour force, increasing female labour participation and new kinds of employment such as temporary work or the hiring of self-employed people?
8. What is the estimated effect of labour market policies on the wage cost and therefore the price of and demand for labour, via the minimum income provision and via taxes and contributions?
9. What is, via the demand for labour, the impact of measures on GDP?

This chapter describes the economic and social rationales of active and passive labour market measures, on the basis of economic literature and the aims of individual measures according to the Eurostat Labour Market Policy database. In describing these measures, referred to as interventions in the nomenclature of Eurostat, we adopt the classification of Eurostat.³ These measures are aimed at “reaching an efficient functioning of the labour market and correcting disequilibria favouring particular groups in the labour market”. These particular groups are generally the unemployed, but could also include the disabled, those about to become unemployed and specifically long-term unemployed.

Passive policies targeted at inactive people, such as disability or child benefits, social assistance and old-age pensions do not classify as labour market measures because they do not aim to improve the functioning of labour market. Neither do active policies aimed at increasing the labour force, such as in-work benefits or certain income tax reforms, classify as labour market measures according to Eurostat because they do not favour particular target groups.

The general aim of passive measures (referred to as supports in the Eurostat nomenclature) is to provide income support, whereas the general aim of active measures (referred to as measures in the Eurostat nomenclature) is to guide workers to work or to improve the quality of labour. We also examined the rationales of the individual measures documented in the EU labour market policy database. With the exceptions of supported employment and rehabilitation of disabled workers and direct job creation, the rationales of active measures are predominantly economic rather than social.

³ Eurostat (2006), Labour market policy database, Methodology, Revision of June 2006, ISSN 1725-0056.

The types of passive measures analysed in this report are:

- Out-of-work income support (Section 1.2);
- Early retirement (Section 1.3).

The types of active measures included are:

- Labour market services (Section 1.4);
- Training (Section 1.5);
- Employment incentives (Section 1.6);
- Direct job creation (Section 1.7);
- Supported work and rehabilitation (Section 1.8);
- Start-up incentives (Section 1.9).

Two types of rationales of labour market measures can be distinguished: the aim of various programmes and the socio-economic logic behind the aims. The latter also points to several risks inherent to measures. For each measure, we therefore discuss policy rationales, underlying socio-economic rationales and socio-economic risks.

The other key questions following the first question on the rationales of active and passive measures are addressed in the conclusion of this chapter, depending on whether the question applies to the type of measure.

1.2 Out-of-work income support

1.2.1 Policy rationales

Four policy rationales for individual out-of-work income support measures can be distinguished. According to Eurostat LMP database, insurance against loss of income is the most common rationale behind out-of-work income support in Europe and also the rationale behind measures to which most expenditures are devoted. But in Mediterranean countries and new Member States guaranteed minimum income is the most common rationale and the rationale to which most expenditures are devoted. In the other EU countries, guaranteed minimum income is the rationale behind different measures aimed at unemployed workers who do not receive unemployment insurance. A third rationale for passive measures is to maintain jobs in the form of short-time work or reduced working hours. This rationale occurs less frequently and with far lower expenditures. Enabling workers to participate in active labour market policies is seldom the main rationale for out-of-work income support. Table B.6.1 in Annex B provides a complete overview of the primary aims of out-of-work income support measures according to national experts who contribute to the Eurostat LMP database.

In addition to the policy rationales behind individual measures, there is an overarching policy rationale for out-of-work income support that is often used in discussions on government budgets. This is the argument that out-of-work income support acts as an economic stabilizer. It means that the budget deficit is allowed to increase due to expenditures on out-of-work income support in order to stabilize consumer demand and more broadly to maintain economic and social stability.

1.2.2 Underlying socio-economic rationales

Insurance against loss of income and guaranteed minimum income are the main policy rationales behind out-of-work income support measures. In this subsection we present underlying socio-economic arguments for these rationales. We also discuss a specific rationale that is mentioned in economic literature but not by policy makers, namely that out-of-work income support enables

workers to search for higher quality job matches. Lastly in this subsection, we discuss the overarching rationale for economic stabilization.

Insurance efficiently reduces the financial risk of unemployment

The main rationale for any insurance is to reduce financial risk. By charging relatively low contributions and paying out under predetermined conditions, unemployment insurance is an efficient way to reduce the risk of loss of income of workers. The rationale behind insurance can also be seen in the design of unemployment benefits:

- Those insured pay contributions;
- Automatic entitlement to benefits under predetermined conditions such as the length of the preceding contribution period or employment period;
- Benefits are granted only to those who are involuntarily unemployed;
- The amount of the unemployment benefit is related to last wage earned;
- The maximum duration of the unemployment benefit is predetermined, most often based on the contribution period (especially in new Member States) and sometimes on age or employment history.

Without insurance, workers who can afford it must save large sums of money themselves to cover the risk of loss of income. At the macroeconomic level, this may result in a higher savings rate and a lower consumption rate. Indirectly, this may affect economic growth since consumption is a stronger motor of economic growth than savings.

In practice, there is a continuous spectrum between (wage-related) unemployment insurance and (flat-rate) unemployment assistance. Countries that provide unemployment insurance often provide unemployment assistance for those who lose their job but do not meet the predetermined conditions for receiving (wage-related) benefits, whilst countries with a flat-rate general unemployment assistance often have a specific insurance against employer insolvency to cover payment of wages due.

Guaranteed minimum income

Unemployment benefits are historically a cornerstone in the guarantee of minimum wages. The pioneer trade unions arranged contributions and unemployment benefits so as to collectively withhold labour supply to uphold minimum wages.⁴ The trade unions' power to withhold labour supply has been the main mechanism to achieve compliance with the minimum wage. All EU countries have adopted a system of unemployment benefits, partly to provide uniform conditions to all workers and partly to enforce this system with the power of the State.

A system of minimum wages and unemployment benefits to achieve compliance with the minimum wage not only has a social rationale of equity, but can also increase total welfare in a non-competitive market, where monopoly firms maximize profits with higher profit margins on less output. The lower output requires fewer workers, who in turn can be offered lower wages to further increase profits in a negative spiral as described by Karl Marx. In this kind of system, a country's economic potential is underutilized.

After the Second World War, most EU countries extended their social insurance system to guarantee a universal minimum income to workers and non-working residents alike. The guaranteed minimum income is a universal flat-rate social assistance benefit, much like unemployment assistance but available to all residents instead of unemployed workers only. As for

⁴ Sol, E. (2000), *Arbeidsvoorzieningsbeleid in Nederland (Public Employment Services in the Netherlands)*, Sdu: The Hague.

unemployment benefits and unemployment insurance, there is a continuous spectrum between unemployment assistance and social assistance, with differences in the degree of means testing, the accumulation with other benefits, job search requirements and the level of benefits.

Besides principles of equity, the desire to ensure minimum living standards is a basis for guaranteeing minimum income. Minimum living standards include adequate housing, access to basic services (gas, water and electricity), education and health care. Another reason to guarantee minimum living standards is that poverty and social problems seem to increase the chance of children suffering similar problems in the future. See, e.g., Bird (2007)⁵ for an overview.

The guarantee of minimum income holds the risk of free rider behaviour, i.e., people may not save sufficient funds and claim social assistance after becoming unemployed and after exhausting their unemployment benefit. Social assistance could thus undermine the willingness to pay unemployment insurance contributions. This free rider risk is an important economic rationale for making social security contributions by workers or their employers compulsory.

Improved matching in high-productivity jobs

There is a long historical debate on whether income support during unemployment improves matching in high-productivity jobs. Mortensen (1984)⁶ reviewed labour market theories and discussions on the existence and efficiency of equilibrium unemployment. According to Mortensen, Phelps and Tobin first hypothesized in 1972 that higher unemployment makes job searching more difficult for each job seeker, so any unemployment must be too high. Hall (1972, 1976) countered with the “spare tyre” theory that employers can fill vacancies faster if unemployment is high, and fewer productive hours are wasted during the search for an employee. Unemployment must be too low as long as there are vacancies. Mortensen (1982) and Pissarides (1984) argued that both employer and job seeker need time to find a good job match, rather than settle for the first opportunity. Unemployment benefits enable unemployed workers to wait for a better paying job, which is called the reservation wage theory in economic literature.

However, Mortensen also stated that on-the-job search for better jobs makes this argument for efficient unemployment invalid: workers can accept the first job and then continue searching for a better job. This debate remained inconclusive until Bentolila and Bertola (1990)⁷ argued that a combination of differences in productivity and hiring or firing costs in jobs is the crucial factor to explain unemployment. These costs make employers reluctant to fire workers but also more reluctant to hire workers if profitability is uncertain. In times of recession prices drop, on-going losses on marginal jobs outweigh the cost of firing and unemployment increases. This explanation of unemployment was compatible with the reservation wage theory of unemployment benefits and paved the way for further macroeconomic insights.

Caballero and Hammour (1991)⁸ speak of a cleansing effect of recessions. i.e., some jobs become unviable when the price of their output drops. People in unviable jobs become unemployed and available for new jobs with new technologies. Higashi (2002)⁹ shows in a theoretical model that if technology changes slowly, company-specific human capital is more valuable, workers stay longer with companies and the unemployment rate is low. If technology changes rapidly, new companies

⁵ Bird, K. (2007), The intergenerational transmission of poverty: An Overview. CPRC Working Paper 99.

⁶ Mortensen, D.T. (1984), Job Search and Labour Market Analysis, North-western University Discussion Paper No. 594.

⁷ Bentolila, S. and G. Bertola (1990), Firing Costs and Labour Demand: How Bad is Euroclerosis?, Review of Economic Studies, vol. 57, issue 3, pp. 381-402.

⁸ Caballero, R.J. and M.L. Hammour (1991), The Cleansing Effect of Recessions, NBER Working Paper no. 3922.

⁹ Higashi, Y. (2002), Firm specific human capital and unemployment in a growing economy, Japan and the World Economy, vol. 14, issue 1, January 2002, pp. 35-44.

constantly enter the market, workers hop between jobs and unemployment is high among workers who do not master new technologies.

In the light of these theories, unemployment is the price for rapid technological changes. Income support has a social rationale for workers unable to cope with the changes, and an economic rationale to enable workers to search or train for new jobs. Theeuwes (2009) based a similar conclusion on his observation that many unemployed workers found jobs in alternative sectors during the mild Dutch post-2000 crisis.¹⁰

Economic stabilization

Out-of-work income support can function as an automatic stabilizer. This is the case if the budget deficit is allowed to increase to the extent of the expenditures on out-of-work income support. Andersen (2011) argued that by supporting income of the unemployed, consumer demand is sustained directly for the unemployed and indirectly for the workers who would otherwise save larger sums of money when facing a higher risk of becoming unemployed.¹¹ A collective system can ensure firstly that money is saved in advance and secondly that lower savings are required than in a private system. In a system in which workers save money on their own, they would have to save more to bridge a certain maximum period of unemployment (say two years) while collective savings only need to cover the average duration of unemployment (say one year).¹²

For automatic stabilizers to be effective, unemployment benefits need to be sufficiently generous and long-lasting. The main challenge in making automatic stabilizers work is making them compatible with incentives to take up new jobs. Andersen mentions activation policies and maximum benefit duration contingent on the aggregate unemployment rate as two options to achieve this compatibility.

Andersen mentions training in qualifications and employment incentives for the long-term unemployed as crucial activation measures, as well as requirements and enforcement of job search for beneficiaries as a crucial feature of passive policies. Other options to activate benefits include:

- Integration of benefits to avoid the unemployment trap, including accumulation with other benefits such as housing and family allowances, and the transferability of the tax threshold of the non-working spouse to the breadwinner;
- Requirements to search and accept jobs including social assistance and accumulative benefits, direct jobs and possibly supported work;
- Orientation of active measures on the demand of employers through information systems and integration with job search assistance;
- Sanctions, preferably discretionary rather than automatic.

Andersen argues in favour of permanent unemployment benefits with increasing activation requirements. In practice, benefits do not necessarily cease upon the expiration of the unemployment benefit, but continue in the form of social assistance, which is quite generous in the Nordic countries.

¹⁰ Theeuwes, J. (2009), *Massaontslagen hoeven niet te leiden tot massawerkloosheid* (Mass layoffs need not result in mass unemployment), *Me Judice*, vol. 2, 11 February 2009.

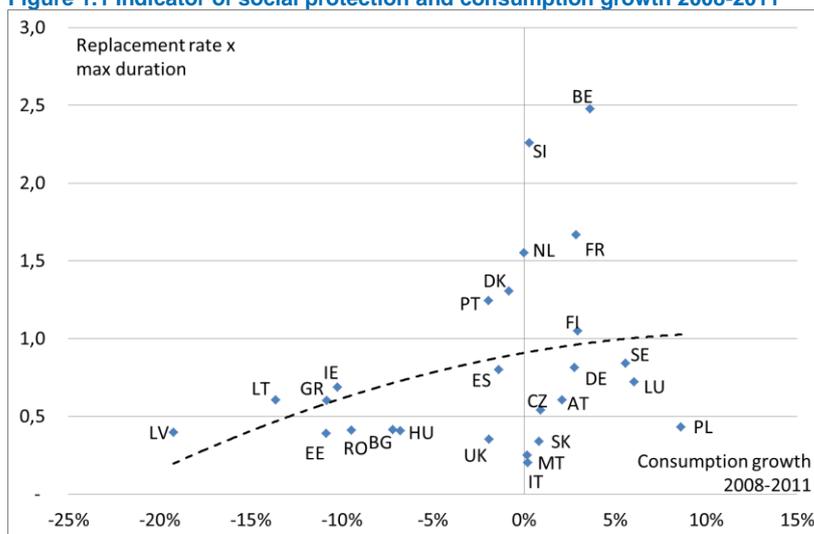
¹¹ Andersen, T. M. (2011), *Unemployment benefits: incentives, insurance and automatic stabilizers - some Scandinavian lessons*, Mutual Learning Programme: Autumn 2011 seminar.

¹² Two years is a typical maximum benefit duration of unemployment benefits in Europe, and the average duration of an unemployment spell in Europe is typically one year.

Economic logic dictates that income protection works as an automatic stabilizer to level consumer demand. Unemployed workers without income support would drastically reduce their consumptive spending, so that one motor of economic growth would falter. Eichorst (2010)¹³ uses the example of Denmark to argue that unemployment insurance had a significant effect as an automatic stabilizer in a country with sufficient levels of income protection. Andersen (2011)¹⁴ highlighted that “the Scandinavian countries have been among the countries doing the most to consolidate public finances in the years prior to the Great Recession, and as a consequence, there has been room to let the automatic stabilizers work during the crisis.”

Nevertheless, these papers do not provide decisive evidence that unemployment insurance works as an automatic stabilizer. As we will show in Chapter 2, it is important to include benefits such as family benefits when assessing the role of social protection. Therefore, the net replacement rate of an unemployed worker with a non-working spouse is used, including family and housing benefits. We multiplied this with the maximum unemployment duration according to MISSOC, thus obtaining a proxy for social protection including level, accumulation and duration of benefits, but still excluding many other factors such as the level of social assistance after the unemployment benefit expires, the coverage of workers and requirements to search and accept jobs. On the face of it, Figure 1.1 might suggest a positive relation between income protection and consumption growth during and after the crisis between 2008-2011. However, statistically, the relationship is completely insignificant. Therefore, the safest conclusion seems to be that consumption depends on many other factors besides social protection.

Figure 1.1 Indicator of social protection and consumption growth 2008-2011



Source: Based on OECD 2009 tax-benefit data, MISSOC 2010 data on max duration and Eurostat national accounts data 2008-2010.

1.2.3 Socio-economic risks

Unemployment benefits lead to higher unemployment rates

The main impact of unemployment benefits on the labour market is that they create a minimum income level for the unemployed, at least for the duration of the benefit. According to traditional job search theory, unemployed workers only accept jobs that pay more than the benefit level. So the

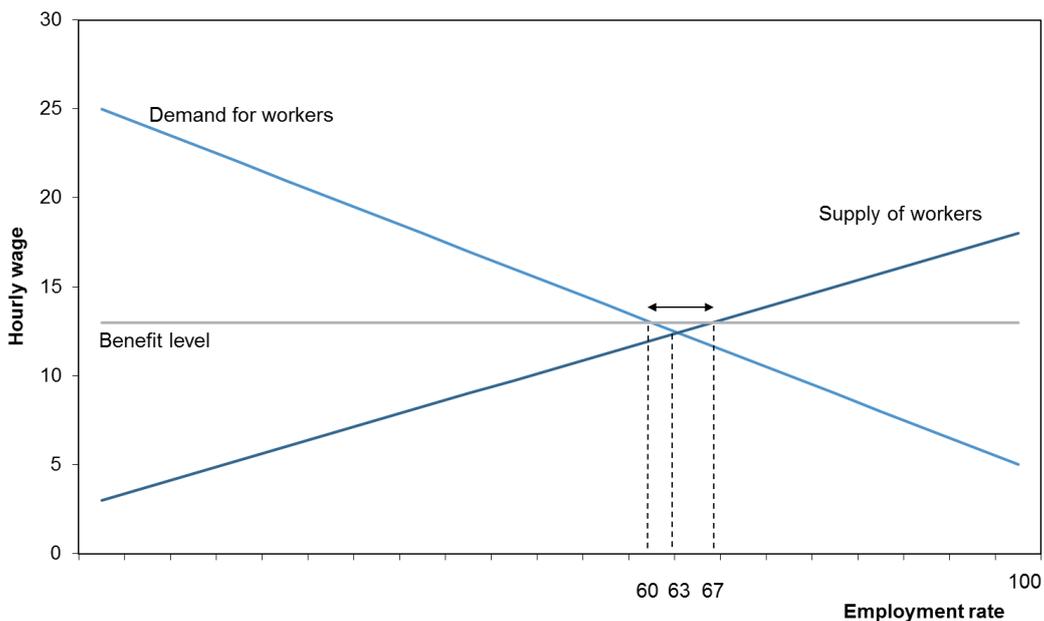
¹³ Eichorst (2010), The impact of the crisis on employment and the role of labour market institutions, Discussion paper 5320, IZA, November 2010.

¹⁴ Andersen, T (2011), Unemployment benefits: incentives, insurance and automatic stabilizers - some Scandinavian lessons Thematic Review Seminar, Brussels, 7 November 2011.

higher the unemployment benefit is, the fewer low-wage jobs unemployed people will accept. This may facilitate the search for better jobs, but also leads to higher unemployment rates.

Figure 1.2 depicts a simplified situation in which workers accept all jobs with wages above the benefit level. Without unemployment benefits, supply and demand would be in balance at an employment rate of 63 per cent and an hourly wage of 12.50 Euros. With unemployment benefits of 13 Euros per hour, workers accept only jobs that pay an hourly wage of 13 Euros, i.e., 67 per cent of the (working age) population in the figure. This 67 per cent is the labour supply. However, employers are only willing to pay 13 Euros for 60 per cent of the workers, which is the demand. The unemployment rate is the difference between supply and demand, namely 7 per cent of the (working age) population, and 10 per cent of the labour force.

Figure 1.2 Supply and demand of workers and the impact of unemployment benefits (example)



The insight that higher unemployment benefits can increase equilibrium unemployment, was regarded as an established empirical effect in the early 1990s, for which we refer to a 1994 OECD study.¹⁵ A secondary implication is that abolishment of the unemployment benefit would increase employment by only part of the unemployment rate: from 60 per cent to 63 per cent in Figure 1.2 rather than from 60 per cent to 67 per cent. This is because without unemployment benefits demand for workers would increase, but at the same time supply of workers would be lower at the new equilibrium wage.

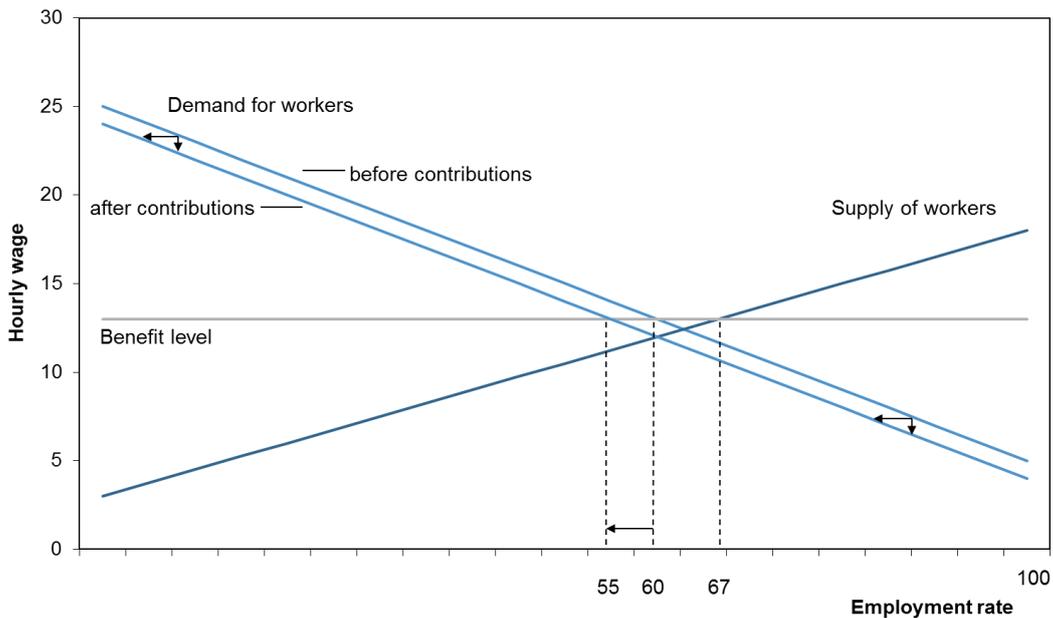
The distorting impact of contributions

We have shown the direct impact of unemployment benefits on the unemployment rate according to the traditional job search model. There is also a potential indirect impact through the funding of the unemployment benefits. To finance unemployment insurance, contributions are levied on wages. This lowers the net wage a worker receives (downward “price effect”). To offer workers the same net wage after contributions, employers need to pay higher gross wages. In response, employers may invest more in machines rather than in people (leftward “substitution effect”), and may shut down activities that were marginally profitable before the increased wage costs (leftward “income

¹⁵ Calmfors, L. (1994), Active Labour Market Policy and Unemployment – A Framework for the Analysis of Crucial Design Features, OECD Economic Studies no. 22.

effect”). In Figure 1.3 employment drops from 60 per cent to 55 per cent of the (working age) population as a result of the contributions for financing the unemployment benefits.

Figure 1.3 Supply and demand of workers and the distorting impact of contributions (example)



The distorting impact of contributions (or wage taxation if unemployment benefits are financed out of general tax income) is potentially the greatest for low-wage jobs. This introduces the rationale for tax-free thresholds. Differences between high-skilled and low-skilled workers are discussed in more detail below.

Unemployment benefits specifically affect low-skilled workers most

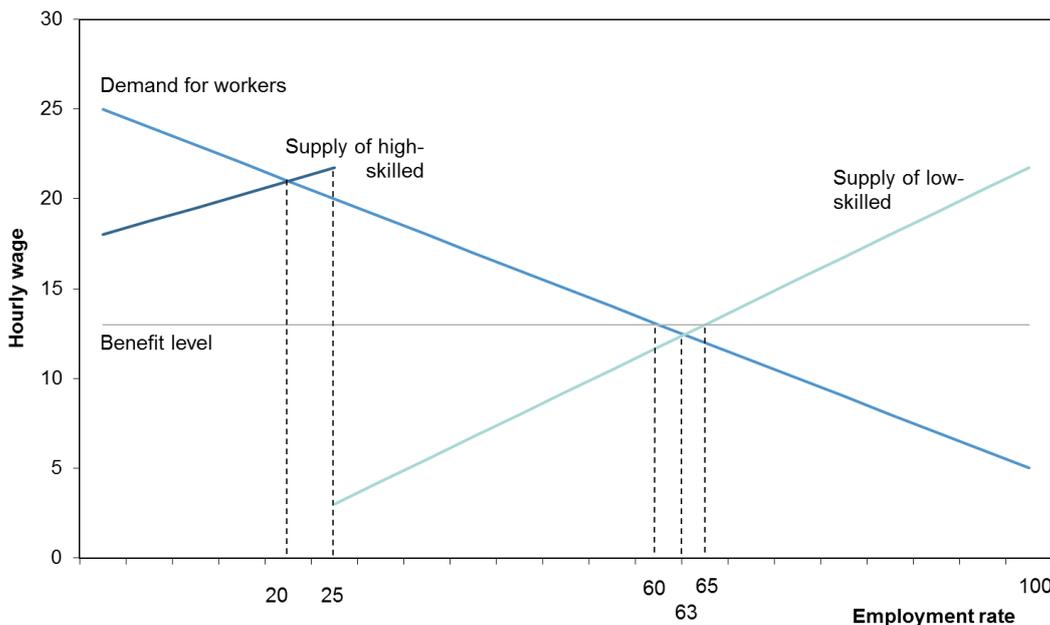
Job search theory takes into account that there are jobs and workers with different characteristics. In the Mortensen and Pissarides models¹⁶, jobs and workers are characterized by their productivity. In these models, optimal matching is achieved when high-skilled workers work in high-productivity jobs and low-skilled workers in low-productivity jobs. To attract high-skilled workers, companies with high-productivity jobs need to offer higher wages than companies with low-productivity jobs.

Simplifying again, a segmented labour market emerges as depicted in Figure 1.4. In this figure, one out of four of the (working age) population is highly skilled and three out of four are low-skilled. Of the total population in Figure 1.4, 55 per cent are employed, 5 per cent are unemployed and 40 per cent are inactive.¹⁷ Of the high-skilled, 80 per cent are employed and 20 per cent are inactive. Of the low-skilled, 47 per cent are employed, 7 per cent are unemployed and 47 per cent are inactive. In this simplified segmented labour market model, unemployment occurs only among the low-skilled. Non-working high-skilled people are not looking for a job since they demand higher wages than offered even for high-productivity jobs.

¹⁶ See the earlier reference to Mortensen (1984).

¹⁷ Employment = 20 + (60-25), unemployment = 0 + (65-60) and inactive = (25-20) + (100-65).

Figure 1.4 Supply and demand of high-skilled and low-skilled workers in the situation of an unemployment benefit (example)



The implication is that in a labour market with different jobs and workers, the benefit level causes unemployment for some of the low-skilled workers, whilst the remainder of the low-skilled workers are inactive. For the high-skilled workers, non-employment is not caused by the benefit level, but primarily by inactivity.¹⁸ This implication is supported by empirical evidence that the unemployment rate is generally lower for people with a higher educational level. This implication also supports the logic that many of the active labour market policies, which we will describe later, are aimed at the low-skilled workforce.

Unemployment benefits increase necessary incentives for participating in activation programmes

In the literature of the early 1990s, unemployment benefits were regarded as an insurance policy with a negative side effect in the form of unemployment. We will discuss this in the next subsection on the risks of unemployment benefits. Governments have to deal with a trade-off between providing insurance and accepting a certain level of unemployment. This trade-off by politicians was modelled in the middle of the current decade. Filges et al. (2007) formulate national welfare as a mathematic function weighting the overall level of wealth on the one hand and the distribution of wealth on the other.¹⁹ They modelled supply, demand and training as an investment to increase the productivity of workers and thereby the demand for workers. They then show that if a weight of zero were attached to the distribution of wealth (equity), it would be best to spend nothing on either unemployment benefits or training the unemployed (*laissez faire*). They continue to show that if equity were assigned a positive weight, only the low-skilled should receive subsidized training. The higher the unemployment benefits are, the fewer incentives low-skilled unemployed workers have to invest in training and the higher the subsidy for training needs to be.

Generalizing, a higher unemployment benefit level increases the incentive needed to make unemployed workers participate in active labour market programmes.

¹⁸ However, the unemployment benefits could affect the inactivity rate of high-skilled workers through the wage ladder mechanism. Low-skilled workers demand higher wages than the unemployment benefit, and the high-skilled demand higher wages than the low-skilled workers, which not all of the high-skilled workers may find.

¹⁹ Filges, T., J. Kennes, B. Larsen and T. Tranaes (2007), The Equity-Efficiency Trade-off in a Frictional Labour Market, IZA Working Paper 2824.

1.3 Early retirement

1.3.1 Policy rationales

Reallocation of unemployment, such as substituting young or unemployed workers for older workers, may originally have been a rationale behind early retirement schemes. Presently, this applies mainly in Mediterranean countries, either to replace retiring workers with unemployed workers or in the case of restructuring, to maintain the jobs of young workers. Gruber, Milligan and Wise (2009)²⁰, however, challenge this view on early retirement, arguing that reallocation of labour had never been the real reason for early retirement, but was an explanation offered after its introduction. Even in the 1970s and 1980s, early retirement benefits were not conditional on the replacement of an older worker with a younger worker in all EU countries. It was not conditional in the Netherlands, for instance.

In the 1990s, youth unemployment dropped and it became a burden to grant older workers leisure without loss of income. With an ageing labour force, the workforce started to wane and the number of pensioners began to increase. It was felt that older workers should be able to trade off leisure for income, rather than granting them leisure without loss of income. This trade-off implies that the earlier a worker retires, the lower the pension becomes, either until or even beyond the legal retirement age. In the latter case, the nature of the scheme changes drastically and is called a pre-pension scheme rather than the original early retirement scheme. In the 1990s these actuarial reforms occurred all over the world (Gruber and Wise, 1998).²¹

At present, the most frequent rationale for early retirement schemes is to facilitate inactivity which is considered unavoidable at the time, or to enable workers to work fewer hours instead of retiring completely. Table B.6.2 in Annex B provides a complete overview of aims of individual early retirement schemes. The most common aim of individual schemes is to provide income support to the older unemployed. In that sense, early retirement is similar to an unemployment benefit, but without the requirement of searching for a job. It appears that most countries have dropped the requirement that retiring employees are replaced with unemployed job seekers.

Belgium and Spain are the only countries that (still) require companies to replace retiring employees with unemployed job seekers. In Spain this measure ("replacement contracts") contains a specific arrangement to encourage older workers to partially retire in order to create opportunities for unemployed people. Opportunities for unemployed people are also the rationale for part-time retirement in France and Germany, but those two countries do not require that retiring employees are replaced with unemployed job seekers.

Austria and Portugal also have part-time retirement schemes, but with a different rationale. Their rationale is that older part-timers are still at work whereas they are not after full early retirement. Sweden has also experimented with part-time retirement with the double motivation of enabling older workers at least work part-time and of creating opportunities for unemployed job seekers; however, Sweden ceased this experiment in 2000. Denmark has a lesser early retirement measure to facilitate the transition of older workers into a flexible job.

²⁰ Gruber, J., K. Milligan, D.A. Wise (2009), *Social Security Programmes and Retirement Around the World: The Relationship to Youth Unemployment*, Introduction and Summary, NBER Working Paper 14647.

²¹ Gruber, J. and D.A. Wise (1998), *Social Security and Retirement: An International Comparison*, *The American Economic Review*, vol. 88, pages 158-163.

In France, Italy and Luxembourg eligibility for early retirement is restricted to workers in companies that restructure their workforce. The motivation is that if mass layoffs are unavoidable, it is better to let the older workers go. If older workers become long-term unemployed, they need to bridge only a short period until legal retirement age, whereas if young workers become long-term unemployed, they are unproductive and dependent on benefits for the long remainder of their working age, which is far more costly.

Publicly funded early retirement schemes do not apply to all countries. The UK never had any such scheme and in the Netherlands early retirement schemes are organized by the social partners. Other countries without early retirement schemes had them in the past but abolished them during the first decade of the 21st century. Those countries include mostly new Member States but Sweden as well.

Some rationales are not formulated as the aim of early retirement schemes, but can be deduced from the design of the scheme, especially the eligibility criteria. The possibility of early retirement after forty working years in a number of countries reflects that rest after a long working life may have been a rationale for early retirement, especially for the lower educated workers who left school and started working early. In various countries women were eligible for retirement at an earlier age than men (Austria, UK, and Belgium). This might reflect a rationale to enable both spouses to retire at the same time, considering that wives are several years younger on average than husbands. However in the 1990s the early retirement age of women was raised to that of men in those countries, changes that could possibly have been accelerated by the European Court of Justice Barber arrest of 1991.

In Finland, eligibility for early retirement is restricted to the long-term older unemployed. The underlying reason is to allow them to stop job searching. Sweden and Denmark had similar measures for their long-term unemployed but abolished them in 2002 and 2006 respectively. In the Netherlands, the older unemployed were exempted from job search requirements in the 1990s. The underlying motivation for Finland for early retirement of older long-term unemployed is to save expenditures on active measures. For the Netherlands the underlying reason was the difficulty to place older workers. That this particular rationale for early retirement occurs in the Nordic countries is likely due to the high costs of active measures in those countries (see also Chapter 2).

The overall picture is that the original rationale for early retirement schemes to combat youth unemployment has waned, but that early retirement schemes are still maintained in many countries as a specific benefit for older unemployed workers.

1.3.2 Underlying socio-economic rationales

Many social security arrangements were created fifty years ago, when the majority of the working population was young and lifetime jobs were normal. At a time when the overall unemployment rate was low and youth unemployment was increasing rapidly, early retirement seemed to make sense to allow older workers to stop working and enable younger workers to start their career. However, early retirement also came with socio-economic risks, as explained in the next subsection.

1.3.3 Socio-economic risks

Early retirement can have the disadvantage of workers regarding early retirement as an entitlement rather than a risk to avoid. Early retirement is a collective arrangement: the cost comes when contributions are paid but not when workers actually retire early. So there is no incentive for the individual worker to postpone retirement if the worker loses no pension because of it. Empirical

micro econometric analyses show that many older workers prefer leisure to income and generally retire at the earliest possible moment. This is not only true for OECD countries, but also Slovenia, for instance (Ecorys, 2004, 2007).²² Dorn and Sousa-Poza (2007)²³ show that early retirement is not only attractive for older workers, but also profitable for companies that want to reduce their workforce in times of crisis whilst circumventing labour market legislation.

The attractiveness of early retirement as a means for employers to reduce employment of older workers is stronger with an increasing wage profile, which means that workers generally earn higher wages the longer they stay with a firm. The promise of higher wages in the future was an excellent mechanism to bind workers to the company. This mechanism was enhanced by employment protection making it difficult for employers to dismiss workers in order to avoid having to pay the higher wages as promised. So early retirement is a solution for employers to reduce wage costs with no loss of income to the employees.

The price for this collective arrangement is the contributions that are needed to fund early retirement, which increase the wage costs and indirectly affect the competitiveness of employers. Furthermore, a high early retirement pension reduces the incentives for older workers to work for less pay, especially if their pension is based on their last earned wages.

This socio-economic risk of using the collective arrangement to reduce wage costs without loss of income of the worker applies not only to early retirement but also to alternative routes for early retirement. Alternative exit routes into retirement (unemployment and disability) have played an important role in OECD countries (Duval, 2004).²⁴ In many countries, the maximum duration of the unemployment benefit increases with age or the number of contribution years and the unemployment benefit can be used to bridge the gap until the (early) retirement age. The tighter conditions for early retirement pensions are, the higher the risk of alternative exit routes for early retirement.

1.4 Labour market services

Labour market services consist of various services, the broad categories being:

- Information services;
- Guidance and counselling;
- The administration of measures and supports.

Public Employment Services offer all three types of services in all EU-countries, although the organization and the targeting of specific groups differ between countries. The aims of individual services in the Eurostat LMP database often correspond literally with the description of the service. We therefore describe the rationales for services based on meagre economic literature.

Information services

Information services consist mainly of providing information on job vacancies to job seekers. The main economic rationale is that this reduces job search costs. In the 1980s, it was noted that unemployment and vacancies co-exist. It was concluded that possible matches did not materialize

²² Ecorys (2004, 2007), The interaction between active and passive measures.

²³ Dorn, D. and A. Sousa-Poza (2010), 'Voluntary' and 'Involuntary' Early Retirement: An International Comparison, Applied Economics, vol. 42, pp. 427-438.

²⁴ Duval, R. (2004), The retirement effects of old-age pension and early retirement schemes in OECD countries, OECD Working Paper.

instantaneously, and part of the total unemployment was called “frictional unemployment”. This frictional unemployment was attributed to job search costs. Indeed, job search costs are one of the cornerstones of job search theory (Mortensen, 1970)²⁵. As discussed in Section 1.2 on out-of-work income support, job search is a requirement for bringing about high-quality job and employee matches. The main disadvantage of on-the-job search is that job separations involve hiring costs. Furthermore, employers and employees are less likely to invest in a job if the employee continues searching for a better job. So facilitating the search by unemployed workers for a high-quality job match has more benefits than reducing the duration of the unemployment spell.

Employment services reduce search costs by offering information on (registered) job vacancies to job seekers and referring job seekers to matching (registered) job vacancies. In general, companies tend to register more vacancies for low-skilled jobs than for high-skilled workers (EU, 2011).²⁶ This implies that information services are typically provided to low-skilled workers. Directing information services at low-skilled workers also makes economic sense. For high-skilled workers, search costs are relatively low in comparison with finding a high-wage job match and personal incentives to search intensively for jobs should be sufficiently high.

However, new developments in ICT and temporary work agencies compete with traditional employment services. ICT developments substantially reduce the cost of finding job information. Job seekers can search jobs via vacancy sites such as Monsterboard and post their CVs. There are search engines that search job vacancies on the Internet, remove duplications and match job vacancies and CVs on the basis of key words. Services based on these engines are offered to employment services and temporary work agencies, who can alert job seekers who are registered with them to new job vacancies via SMS or tweet.

To conclude, there is a strong rationale for information services, especially for low-skilled workers, but there seems to be a large potential to further reduce job search costs through new technologies.

Guidance and Counselling

Guidance and counselling refers to individual case management and includes vocational guidance, counselling and job-search assistance. In early literature on counselling, counselling is seen as a means to provide emotional and practical support to job searchers. Unemployment was viewed in a socio-economic context, rather than as a problem that an individual can solve²⁷. This view may be seen in the light of the high unemployment rates of the 1980s. As from the 1990s, the rationale for guidance and counselling shifted to helping job seekers find work, or preparing people for work.

The main rationale for counselling is that job searchers increase the intensity of job search when counselled (Gorter and Kalb, 1996)²⁸. Van den Berg and Van der Klaauw (2006)²⁹ assume that counselling improves the use of formal channels. The case manager perfects the application letters and CVs and refers job seekers to job vacancies. They argue that counselling improves the rate of applications, but that unemployed workers have an incentive to reject anything less than the best job offers knowing that future openings also arrive at a higher rate. To reduce this incentive to reject

²⁵ Mortensen, D.T. (1970), Job Search, the Duration of Unemployment and the Phillips Curve, *The American Economic Review*, vol. 60, pp. 847-862.

²⁶ EU Job Vacancy Monitor, <http://ec.europa.eu/social/main.jsp?catId=955&langId=en>.

²⁷ Fineman, S. (1983), Counselling the Unemployed – Help and Helplessness, *British Journal of Guidance & Counselling*, vol. 11, pp. 1-9.

²⁸ Gorter, C. and G.R.J. Kalb (1996), Estimating the Effect of Counselling and Monitoring the Unemployed Using a Job Search Model, *The Journal of Human Resources*, vol. 31, pp. 590-610.

²⁹ Van den Berg, G.J. and B. van der Klaauw (2006), Counselling and Monitoring of Unemployed Workers: Theory and Evidence from a Controlled Social Experiment, *International Economic Review*, vol. 47, pp. 895-936.

jobs, Van den Berg and Van der Klaauw argue that monitoring is needed to ensure that the unemployed accept the first reasonable job offer that comes along. Reviewing earlier literature, they argue that counselling only improved the exit rate into employment when combined with monitoring. They argue that monitoring should be less intensive the higher the unemployment rate is, because then there will be less incentive to accept only the best perceived jobs.

However, counselling and especially vocational guidance might not only reduce the unemployment duration, but even more importantly it may reduce the recurrence of unemployment (Crepon et al., 2005)³⁰. The reason is that counselling helps in finding higher quality, longer lasting job matches. Crepon et al. argue that employment services can help both through their knowledge of jobs in demand and by helping job seekers assess what highly demanded occupations are suitable for them. Caballero and Hammour (1996)³¹ argue that switching to new types of jobs is especially important in times of crisis. In times of crisis, jobs based on old technologies become unviable and workers should find jobs based on new technologies. Counselling may help workers find jobs with good perspectives.

To conclude, counselling is not only aimed at helping job seekers find jobs faster, but more importantly at helping job seekers find better jobs that last longer.

Administration

One important function of Administration can be to target job seekers for trajectories. The rationale for targeting is to offer trajectories to job seekers for whom the measure is likely to be most effective and to avoid deadweight loss of offering trajectories to job seekers who would have found a job anyway without help. Targeting can be based on an assessment of the chance of job seekers finding a job, typically within the next six months (e.g., Germany, the Netherlands). This assessment is called profiling. Trajectories are offered to job seekers with intermediate job prospects. Those with good job prospects are classified as not needing employment services whilst those whose job prospects are too low are not offered any trajectories at all. The chances of finding a job depend on the business cycle, but the classification of job seekers also depends in practice on available budgets for employment services. For this reason, the Dutch government required around the year 2000 that all unemployed job seekers be placed in or offered a trajectory within twelve months (“Comprehensive Approach”). Public employment services measures in other countries target certain groups without individual profiling, for example the lower educated (Finland) or vulnerable groups (Austria).

Another Administration task is to generate the information needed to spend wisely on active measures. There is a long-standing debate on whether active labour market policies and the provision of benefits should or should not be administrated separately. The OECD argued in the 1960s that active and passive benefits should be administrated separately by public employment services and the social security fund.³² The rationale of the OECD was that an integrated administration would tend to focus too much on monitoring benefit entitlements rather than helping unemployed workers find jobs. On the other hand, it can be argued that social security funds have a financial incentive to help unemployed workers find a job and that they could align procedures for active and passive policies. Examples of such alignment are:

- To target job seekers more strictly for active policies when passive policies strain the budget;

³⁰ Crepon, B., M. Dejemeppe, M. Gurgand (2005), Counselling the Unemployed: Does it Lower Unemployment Duration and Recurrence? IZA Discussion Paper 1796.

³¹ Caballero, R.J. and M.L. Hammour (1996), On the Timing and Efficiency of Creative Destruction, *The Quarterly Economic Review*, vol. 111, pp. 805-852.

³² OECD (1967), *Manpower and Social Policy in the Netherlands*.

- To cease benefit immediately upon notification of finding a job or insufficient job search;
- To avoid duplication of forms and intakes.

An argument against integrating the administration of active and passive policies is the risk of policies becoming focussed on reducing benefit dependency rather than maximizing labour force participation. In particular, social security funds have no financial incentive to provide active measures to non-beneficiaries.

Thuy, Hansen and Pride (2001)³³ state the primary administrative role of public employment services has turned into referring the unemployed to active labour market policy programmes, but that the role of public employment services may extend to organizing and sponsoring programmes. Public employment services have separate budgets for hiring third parties in the private sector to deliver employment services. Public employment services may not be automatically entitled to deliver active measures. But the responsibility for administration gives the public services an advantage to deliver active measures cost-effectively, an advantage that must be maintained through continuous improvements.

1.5 Training

1.5.1 Policy rationales

Training as a labour market measure comprises the training of both the unemployed and the employed who are at risk of becoming unemployed. The most popular rationale for training is to provide workers with occupational skills in order to improve their chances of finding or maintaining a job and of employability in general. Some of this training aims to upgrade skills of workers; other training aims to provide workers with new skills.

Training is generally implemented through vocational training in occupational training centres, through apprenticeships or work experience schemes (Table B.6.3 in Annex B). Some programmes exist for specific target groups such as the disadvantaged, youth, women, the disabled, ethnic minorities and immigrants. Vocational training of the unemployed may include employees at risk of losing their job. Training subsidies may also be aimed at enabling job seekers to complete formal education. This is the case in six Member States.

Also, only eight Member States have specific training measures aimed at facilitating the occupational mobility of unemployed job seekers. This indicates that training in most countries aims to improve the qualifications of targeted groups in the labour force. However, some countries that, before the crisis of 2009, spent the largest share of GDP on training, devoted the largest share of training to improving the mobility of workers:

- Austria: 0.4% of GDP spent on training in 2008; 25% of training spent on improving job mobility;
- Finland: 0.4% of GDP spent on training in 2008; 78% of training spent on improving job mobility;
- Sweden: 0.3% of GDP spent on training in 2006; 62% of training spent on improving job mobility.

Only four Member States subsidize training of employees who are at risk of losing their job for purposes of keeping their job. In addition, employers can be required to provide training for certain employment incentives, but except for disabled workers in Bulgaria expenditures on such employment incentives are typically small.

³³ Thuy, P., E. Hansen and D. Price (2001), *The Public Employment Service in a Changing Labour Market*, ILO publication, ISBN 92-2-111388-4.

Some training programmes have social objectives as their primary rationale, namely to improve prospects of labour market integration (five Member States according to the Eurostat LMP database), rather than direct job placement. These programmes include raising basic skills in order to prepare people for active labour market programmes, self-assessment, setting goals and planning the future. These programmes are aimed at those farthest removed from the labour market, particularly the long-term unemployed. And sometimes the goal of these programmes is to get people used to a working life by improving their work attitude and getting them used to the work rhythm.

However, although social inclusion is an important rationale for some training measures and Germany even spent one billion euros on this kind of training in 2008 (source: Eurostat LMP database), skills improvement is clearly the dominant rationale for training. However, two countries, Finland and Sweden, have used training primarily to improve the occupational job mobility of unemployed workers and employees at risk, although Sweden strongly reduced expenditures on training in 2007 and 2008.

1.5.2 *Underlying socio-economic rationales*

Training provided by employers or the government

Although training may be aimed at improving job prospects and qualifications should increase productivity, it does not necessarily imply that the government should invest in training rather than the employer or employee.

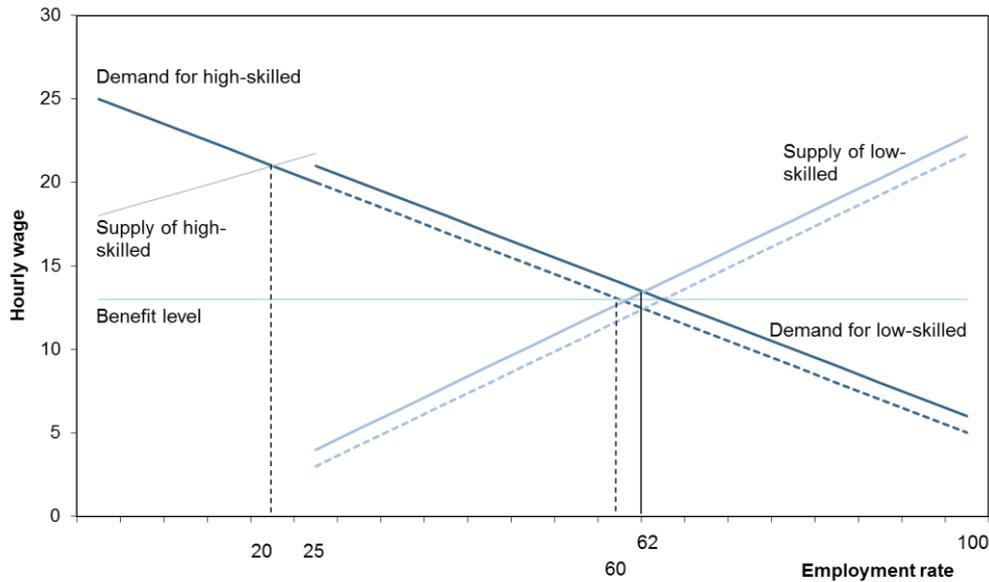
Classical Beckerian theory states that employers should only invest in company-specific skills, and the government needs to provide general training. The reason is that firms need to pay less than the zero-profit wages to recover the costs of training. If general training is provided, a competitor may offer the trained employee slightly higher wages and the first employer loses out on his investment.

Acemoglu and Pischke (1998)³⁴ show, however, that employers have an incentive to train even low-skilled workers in general skills as long as, firstly, the productivity gains of low-skilled workers are high enough and, secondly, the wage gain for low-skilled workers is too low for them to invest in their own training.

This rationale is illustrated in Figure 1.5, where it is assumed that all low-skilled people receive training. For training to be incentive-compatible, workers will demand higher wages after training. In Figure 1.5, this shifts the supply line of the low-skilled workers up from the dashed line to the solid line. If the demand for trained low-skilled workers were to remain the same as for untrained low-skilled workers, there is a risk that the equilibrium wage will remain at benefit level and employment will remain the same. Furthermore, if training would not improve productivity, training would be ineffective. This is illustrated in Figure 1.5 where the new solid supply line meets the old dashed demand line at the benefit level.

³⁴ Acemoglu, D. and J.-S. Pischke, The Structure of Wages and Investment in General Training, NBER Working Paper 6357.

Figure 1.5 Impact of training on the unemployment level (example)



Notes: Dashed lines: supply and demand of low-skilled before training, solid lines: supply and demand of low-skilled after training.

For training to be effective, it should increase productivity, and in that case employers are more likely to pay higher wages for trained low-skilled workers. In Figure 1.5, the demand shifts up to the solid line and employment increases by 2 per cent of the (working age) population, at slightly higher wages than the benefit level. The rationale to provide this training through public funds is that the wage gain for low-skilled workers may be too small to invest in training, but that society as a whole could benefit from training through reduced unemployment. It is hard to assess the empirical support for this rationale. Acemoglu and Pischke argue that both in the USA and in Germany most training provided by employers is in general skills. This could indicate that training comes with deadweight losses because employers might have provided training to the unemployed they hire.

Recognition of skills

A decisive argument for government-funded training could be the recognition of trained skills by employers. This rationale is not voiced as the aim for individual training measures, nor is this rationale mentioned in economic literature; however, recognition of skills has been mentioned as a key factor in determining the effectiveness of training. A national programme for vocational training such as in Germany could make skills recognizable to all employers, while competing local programmes such as in Spain might make skills less recognizable to employers.

Training in new skills

Conventional wisdom is that training is not effective in times of high unemployment because the demand for workers, untrained or trained, is low. This is a tentative conclusion already drawn by Calmfors (1994). On the other hand, there is extensive theoretical literature stating that the best time to invest in new technologies is in times of crisis, as discussed in the previous section under job counselling. This type of training comprises training of new skills as opposed to the dominant type of training to improve existing skills.

This is the rationale behind the “New Skills for New Jobs” initiative launched by the European Commission in 2008. Job counselling may help to find a suitable new occupation and the necessary skills may be gained through training. Despite these new skills for new jobs rationale, there is little economic literature on the type of training for acquiring new skills rather than improving existing skills.

1.5.3 Socio-economic risks

Crowding out: replacing untrained employed with trained unemployed with improved skills

Training as a labour market measure is often targeted at the low-skilled unemployed and not the whole labour force of low-skilled workers. For training to be effective, training should improve the productivity of low-skilled unemployed in less demanding jobs. Employers thus have an incentive to replace low-skilled employees with trained low-skilled unemployed, at least in the absence of firing costs. To effectively reduce unemployment, training should in turn be provided to those newly unemployed after the layoff. So the risk is that the government continues training newly dismissed untrained employees until the whole low-skilled workforce is trained by the government rather than by the employers.

As long as trained workers are more productive, equilibrium should emerge with higher wages and a different employment level as shown in Figure 1.5. However, when trained workers merely replace untrained workers without increasing productivity, the investment in training is counterproductive since it is not effective but does cost money. If this money is raised through contributions, the situation of Figure 1.3 applies and the employment level will decrease because of wage taxation. This situation is referred to as crowding out, with Spain in the 1990s as a primary example.³⁵

Training and cream-skimming

Another incentive-related problem to training is the role of administrators. In most systems administrators select participants for training programmes and need to show results. Some unemployed workers are more likely to find a job than others. Whilst it is most effective to provide training to those who would not be able to find a job on their own, the administrator obtains the highest outputs of training by providing training to unemployed workers who would be able to find a job on their own. This effect is called cream-skimming (Bassi, 1984).³⁶ If cream-skimming does occur, it would have the effect of diverting training away from those who need it most.

1.6 Employment incentives

1.6.1 Public rationales

In the Eurostat classification, employment incentives consist of temporary or permanent recruitment incentives for employers and maintenance incentives, but not incentives to the workers themselves. Almost all employment incentives are for employers to recruit unemployed or disabled workers, or unemployed workers belonging to specific target groups such as the older or the younger unemployed (Table B.6.5 in Annex B). Generally, the aim is recruitment into a hopefully permanent job, but many programmes also aim to provide typically young unemployed workers with a temporary job to gain work experience. In 2009, according to the Eurostat LMP database, only Hungary has substantial subsidies for employers to maintain jobs of workers at risk, although Spain has subsidies to maintain jobs in certain regions and Austria has subsidies to retain older workers in certain industries.

In north-western Europe (Germany, the Netherlands, Denmark, Sweden) the main rationale behind most individual schemes is to provide society with useful services such as parks maintenance and street surveillance. These jobs may be direct jobs in other countries, but in the above-mentioned countries they are partly subsidized instead of fully subsidized, the rationale being that if a job is

³⁵ Dolado, J.J., Felgueroso, F. and J.F. Jimeno (2000), *European Economic Review*, vol. 44, pp. 943-956.

³⁶ Bassi, L. J. (1984). Estimating the Effect of Training Programs with Non-random Selection. *The Review of Economics and Statistics*, vol. 66, pp. 36-43.

truly useful, the employer should be willing to bear part of the cost. This saves some of the subsidy and also increases the likelihood of the subsidized jobs being truly useful to the community.

In Bulgaria, the main employment incentive has a social rationale, i.e., to help older workers achieve the minimum number of contributory years for old-age pension entitlement.

A specifically important rationale for employment incentives in two countries, namely Italy and Spain is the conversion of temporary contracts into permanent contracts there. The labour market in these two countries is strongly segmented into jobs with a temporary contract and jobs with a permanent contract, but these subsidies have been largely discontinued. However, Italy still grants subsidies for converting the temporary contracts of apprentices into permanent contracts. And the offer of a permanent contract is still an important criterion for recruitment subsidies in those two countries.

1.6.2 *Underlying economic rationales*

Employment incentives – always targeted

There is an economic rationale for employment incentives being targeted at vulnerable groups. The reason is that if all employees pay contributions for a general wage subsidy, then the workers' contributions costs only offset the gain of the incentives and the employment incentive is ineffective. If a general wage subsidy is considered at all, it makes more sense to fund it through value added taxes. This debate enters the realm of tax-benefit reforms, which is beyond the scope of this study.

Employment incentives – for the long-term unemployed

Workers who are unemployed for lengthy periods of time tend to become discouraged and withdraw from the labour market (Calmfors, 1994). Employment incentives (and direct job creation) aim to increase the demand for workers and to foster participation of the (long-term) unemployed in the labour market. The aim to prevent the discouraged worker effect seems particularly relevant in times of high and persistent unemployment. Aiming employment incentives at the long-term unemployed also reduces the risk of deadweight loss, since the long-term unemployed have a smaller chance of finding a job without help.

1.6.3 *Socio-economic risks*

Factors reducing the effectiveness of employment incentives

Calmfors (1994) states that deadweight loss and the substitution effect are the main factors reducing the effectiveness of employment incentives. Firstly, the deadweight loss arises if firms hire subsidized workers who would have been hired even without the subsidy. The deadweight loss is one reason to target employment incentives at the long-term unemployed, because typically more than half of the newly unemployed workers find a job within three months without help. Gerfin, Lechner and Steiger (2002)³⁷ indeed find that employment incentives are ineffective for the short-term unemployed and may be effective for the long-term unemployed.

Secondly, the substitution effect refers to the possibility that employers simply replace non-subsidized employees with unemployed subsidized workers.

³⁷ Gerfin, M., M. Lechner, H. Steiger (2002), Does Subsidized Temporary Employment Get the Unemployed Back to Work? IZA Discussion Paper 606.

Thirdly, the effectiveness of employment incentives depends on the demand elasticity of wages. The classic notion is that demand elasticity is specifically high for low-wage jobs. Some studies find that one per cent lower wages increases demand by 0.5%, e.g. Hamermesh (1993).³⁸ Other studies do not see a significant impact of minimum wages on the employment level, e.g. OECD (1999).³⁹ A possible explanation for different outcomes in different studies could be that employment is more sensitive to wages in times of crisis than in times of prosperity.

Fourthly, the displacement effect reduces the effectiveness of employment incentives. Employers who receive wage subsidies for workers in effect receive a company subsidy and thus gain an advantage over companies without subsidized workers. Marx (2000)⁴⁰ states this effect is seldom mentioned in the literature.

A fifth factor, also not mentioned frequently in the literature, is the negative effect of taxation to fund employment incentives. If funded through contributions, this would partially offset the employment incentives. One way to address this problem is to exempt the low-skilled from contributions and charge the high-skilled. This is achieved by introducing or raising a lower wage limit below which no contributions are paid.

Another risk is that the employer recruits a new worker to collect the subsidy and then dismisses the worker after one month. When targeted at workers who have been unemployed for, say, six months there is the risk that employers postpone recruiting unemployed workers until the unemployed meet this six month criteria.

Maintenance incentives and the skills trap

Maintenance incentives for keeping certain types of workers employed are rare. A specific risk of these subsidies is the creation of skills traps, mentioned in Opstal et al (1998).⁴¹ Maintenance subsidies typically apply up to certain wage levels. Employers who invest in training workers by means of a maintenance subsidy need to offer a higher wage for the training to be incentive-compatible for the workers. But by offering a higher wage the employers lose the maintenance subsidy for low-wage workers. More generally, maintenance subsidies subsidize low-skilled jobs over high-skilled jobs, and consequently the skills trap exists not only at the individual level, but even at the macro-economic level, affecting the competitiveness of the country as a whole.

1.7 Direct job creation

1.7.1 Policy rationales

Direct job creation refers to the creation of fully or largely subsidized jobs. All countries have had direct job measures in the past, but some countries discontinued those measures during the first decade of the 21st century, notably the north-western countries of Europe (Denmark, the Netherlands, Sweden, see Table B.6.4 in Annex B). Like employment incentives, most directly created jobs are targeted at unemployed workers or certain target groups of unemployed. Luxembourg has a special arrangement in place for public works since 1994, “extraordinary works of public interest” where workers in sectors suffering economic difficulties are temporarily engaged in public works while keeping their old employment contract.

³⁸ Hamermesh, D. (1993), *Labour Demand*, Princeton: Princeton University Press.

³⁹ OECD (1999), *Employment Outlook*, Paris.

⁴⁰ Marx, I. (2000), *Wat leert Evaluatie Onderzoek? (What Does Evaluation Research Teach Us?)*, Centrum voor Sociaal Beleid Paper.

⁴¹ Van Opstal, R., H. Roodenburg and R. Welters (1998), *Low skilled jobs through job creation and wage subsidies*, CPB report.

Direct jobs generally aim to combine the provision of temporary work experience to the unemployed with the provision of useful non-market services to society. This is a social rationale that cuts both ways: unemployed workers have meaningful activities and society benefits from this provision of non-market services. The underlying reason for temporary work experience is mainly to fight social exclusion with the ultimate aim to help people get a regular job. The measures especially seek to avoid early discouragement and to keep job seekers in a work rhythm. However, in some new Member States, employment in public works can be for extended periods of time. Four countries create jobs to consolidate skills acquired in vocational training programmes.

1.7.2 *Underlying socio-economic rationales*

Direct jobs are typically public sector jobs. One reason for this is that the government can decide without self-interest which jobs are non-market jobs. The other reason is that the public sector may avoid the substitution of regular jobs with fully subsidized jobs as well as the displacement of regular jobs of other employers. The public sector is more likely to refrain from such substitutions than the private sector, as the moral principle is to serve public interest rather than achieve private gains. To avoid substitution and displacement, direct jobs must meet the additionality requirement (Van Opstal et al., 1998). This means that non-market jobs must consist of tasks that are not covered by regular jobs. Since there is a regular demand for high-skilled jobs, directly created jobs tend to be low-skilled jobs such as park tenders, street patrollers, child care assistants or certain jobs in NGOs.

A final rationale of direct job creation is that job seekers may intensify their search for better jobs after being offered a directly created job. The reason for this is that these jobs are generally less attractive jobs but that rejecting the offered job may result in loss of benefits. By selectively offering such jobs to unemployed workers suspected of informal work, these jobs may serve as a means to terminate benefits. If the majority would reject the job offered, savings on terminated benefits may outweigh the cost of the directly created jobs. This practice is never the principal rationale, but economic studies do mention and analyse this use of directly created jobs.

1.7.3 *Socio-economic risks*

The creation of jobs to provide unemployed workers with temporary work experience comes with the risk of deadweight loss, i.e., people taking up a subsidized job who could have found a regular job directly. A solution to reduce the deadweight loss as with employment incentives is to target the measure at long-term unemployed workers. Since direct job creation is typically aimed at the long-term unemployed, this measure would typically apply at the end of an economic downturn, when those who lost their job at the start of the downturn have been unemployed for a longer period of time. From this perspective timeliness and temporariness of direct job creation are crucial factors, since direct job schemes are less rational at the start of an economic upswing. For example the French “Nouveaux Services – Emplois Jeunes” program to create direct jobs for young people in 1997 has been criticized for being very costly and insufficient to provide workers with skills that are recognized by regular employers⁴² – and it took effect in years of economic recovery.

Besides the risk of deadweight loss, direct job creation involves the threat of temporary parking becoming permanent. This risk is called the lock-in effect and refers to workers who never make the switch from the subsidized job to a regular job. The risk of lock-in is implicit in the additionality requirement: the skills required for directly created jobs are not necessarily required for regular

⁴² OECD (2002), Perspectives de l'emploi de l'OCDE, June 2002, page 39.

jobs, and furthermore the skills required for directly created jobs have a low profile. De Koning (2005) concludes after reviewing 130 studies that direct job creation tends to have a small and possibly even negative effect on the chance of getting a regular job.

1.8 Supported work and rehabilitation

1.8.1 Policy rationales

Disabled workers and those with long-term illnesses are a particularly disadvantaged group in the labour market. Employers may face additional costs when recruiting workers who are disabled or who have recovered from a disability as well as the risk of recurrent disability. Financial incentives and rehabilitation aim to reintegrate disabled workers into regular work.

Other measures to improve the chances of disabled workers on the labour market consist of re-integration activities such as training, support provided by a job coach, adapting the workplace or a customized mix of such measures. Some countries aim to increase the employment of disabled workers through wage subsidies or exemptions from social security contributions.

But the most frequent and also the most substantial measure for disabled workers consists of sheltered work places (Table B.6.6 in Annex B). The aim of sheltered work places is to provide disabled workers with a work environment adapted to their abilities, in companies that work with a majority of disabled workers. This could be a quiet workplace for mentally disabled workers or a slower work pace for physically disabled workers. Those companies sell their products or services on the market, but receive a subsidy for employing disabled workers.

In the Eurostat classification, permanent sheltered workplaces are not regarded as a labour market measure, since they do not address the matching of supply and demand, but are rather aimed at socially integrating disabled workers. Temporary sheltered workplaces aim to provide disabled workers with work experience to improve their chances on the labour market, and are classified as a labour market measure. However, there is a continuous spectrum from temporary to permanent sheltered workplaces. In some countries, such as the UK and Sweden, sheltered workplaces aim to ultimately re-integrate disabled workers into regular jobs, but in practice it is accepted that few workers in the sheltered workplace actually find a regular job. The implication is that similar measures with similar outflow rates into regular jobs are counted in some countries as labour market measures but not in other countries, depending on whether the professed aim is to re-integrate a few or to engage the majority in useful activities.

In some Nordic countries a connection to the labour market remains the ultimate aim even for the severely and permanently disabled, although it is accepted that only a few actually re-integrate into regular work. For example, a Swedish programme (OSA) aims to create sheltered workplaces in the public sector for the severely disabled, primarily to safeguard the entitlement of disabled workers to paid work but ultimately to rehabilitate the workers into a regular job. Denmark has flexible jobs for disabled workers with long-term limitations to their working capacity, for the purpose of enabling them to obtain or preserve a connection to the labour market.

1.8.2 Underlying socio-economic rationales

Financial incentives for regular employment of the disabled

In comparison with regular (low-skilled) workers, there are additional rationales to provide financial incentives to employers to hire or retain disabled workers. Employers incur additional costs for the employment of disabled workers, due to workplace adjustments, a higher risk of absence due to

sickness, a slower work pace and a higher risk of (recurrent) disability to work. The same type of risks associated with regular employment incentives apply to employment incentives for the disabled, but in different ways.

Disability-related rehabilitation and training

Temporary jobs and training in the workplace are the most frequent and substantial examples of rehabilitation and training. A rationale of temporary jobs is that employers can try out a disabled worker before hiring the worker on a permanent basis. This is called the stepping stone function of a temporary job. In the Netherlands, temporary work agencies provide work to roughly ten per cent of the population. An analysis of an annual survey covering sixteen years and thousands of temporary workers, indicates that the probability of disabled and also older workers finding a permanent job with the employer after the temporary job comes to an end is almost the same for disabled workers (12%) and older workers (45+: 13%) as for the average temporary worker (14%), whereas this probability is significantly lower for long-term unemployed and ethnic minorities (both 9%).⁴³ Thus, a temporary contract for disabled workers can be an effective stepping stone for disabled workers.

Temporary sheltered workplaces

The underlying economic rationale for temporary sheltered workplaces is quite the same as the public rationale behind the measure.

1.8.3 Socio-economic risks

Financial incentives for regular employment of the disabled

As is the case with long-term unemployed workers, disabled workers in the rehabilitation phase have a low probability of finding a job. This should limit the potential of deadweight losses, i.e., the hiring of workers who would have been hired even without the subsidy. The substitution effect of hiring a disabled worker instead of a healthy worker may exist but may also be intentional. The displacement effect of companies without disabled workers by companies who employ disabled workers with a subsidy should be small if the subsidy truly is a compensation for higher costs. The subsidy can be granted for disabled workers regardless of wage level, thus avoiding the skills trap created by employment incentives for low-wage jobs.

The main factor for determining the effectiveness of financial incentives for recruiting disabled workers is whether financial incentives are sufficient to overcome the perceived risks of employing disabled workers.

Temporary sheltered workplaces

The main risk of temporary sheltered workplaces, as with direct job creation as discussed in the previous section, is the lock-in effect. The lock-in effect occurs when regular employers still consider the risk of employing disabled workers as too high despite their work experience in the sheltered workplace. Virtually no evaluations of temporary sheltered workplaces can be found in academic papers, but there is no reason to assume that they could be more effective with respect to the chance of finding a regular job than subsidized jobs in general.

⁴³ Ecorys (2009), *Uitzendkrachten in beweging (Temporary Workers on the Move)*, commissioned by the General Union of Temporary Work Agencies (ABU), downloadable via www.abukenniscentrum.nl.

Sheltered workplaces produce articles that are sold on the market. Therefore, sheltered workplaces compete with regular companies. Even if sheltered workplaces charge market prices, the sales of regular companies without subsidies are likely down by the amount of the sales of sheltered workplaces, implying a risk of displacement of regular workers even if prices are not distorted.

Rehabilitation

Training does not necessarily address barriers as perceived by employers to hire disabled workers, which include the perceived risk of lower productivity and recurrence into disability. In recognition of additional barriers, rehabilitation is offered in the form of tailor-made versions of other measures, specific measures such as workplace adjustments or job coaching and in some countries packaged combinations of other measures.

Interaction with passive benefits

Disabled workers who take up a job run the risk of no longer being classified as disabled workers, even if the disablement recurs. Most literature on this subject dates from the 1990s, for example Hennessey and Muller (1995).⁴⁴ However, this risk still exists in some countries. In the Netherlands, disabled workers who never had a job have a non-means tested minimum income whilst disabled workers who once had a job receive a means-tested minimum income after two years.⁴⁵ This creates a severe disincentive for young disabled workers to take up their first job and they risk the loss of a permanent (non-means tested) benefit after falling back into disability.

1.9 Start-up incentives

1.9.1 *Policy rationales*

The most frequent policy rationales for start-up incentives are an exit from unemployment through self-employment and the promotion of entrepreneurship of the unemployed, see Table B.6.7 in Annex B. These reasons are similar, but the focus is different. When the aim is an exit from unemployment, self-employment is considered as only one of the ways to get out of unemployment and is not necessarily preferred over regular employment. For example, in the Netherlands the public employment services are required to assess the likelihood of finding a job. Only when the unemployed have been unable to find a job in the first six months, self-employment can be considered as an option. If the aim is to promote entrepreneurship, self-employment is the preferred option. In some countries, self-employment is promoted particularly in certain sectors, for example in agriculture in Bulgaria and in ICT in Greece.

Other rationales behind start-up incentives are to guarantee a minimum income during the initial months of the business, to increase the survival probability of the business and to provide facilities to start a business. These facilities are not necessarily financial facilities but may include help with the business plan, consultation or training. In Latvia, the aim of the only start-up incentive, consisting of consultation and training, is to improve the entrepreneurial abilities of vulnerable groups.

⁴⁴ Hennessey, J.C. and L.S. Muller (1995), The Effect of Vocational Rehabilitation and Work Incentives on Helping the Disabled-Worker Beneficiary Back to Work, Social Security Bulletin, vol. 58, pp. 15-28.

⁴⁵ M. Canoy, M. van der Ende and M. Wilkens (2010), Neem drempels voor arbeidsparticipatie weg (Remove bottlenecks for labour force participation), MeJustice, volume 3.

1.9.2 Underlying socio-economic rationales

There is ample literature on the likelihood of entrepreneurial success. The literature even contains comparisons of start-ups of unemployed workers and regular start-ups or unemployed workers seeking jobs. However, literature on the underlying rationales to help unemployed workers start their own business is rare, an exception being an evaluation by Van der Ende et al. (2011).⁴⁶ These authors discuss the rationales of different forms of start-up incentives in the Netherlands as part of their evaluation.

Guidance and training

The main rationale for guidance and training is to help people prepare for their own business and to help avoid the pitfalls of early entrepreneurship. But guidance and preparation can also have the additional purposes of assessing whether entrepreneurship really fits the unemployed worker. When the unemployed quickly come to their own conclusion that entrepreneurship does not suit them, they may be more motivated to search for a regular job. Guidance and training also enable the employment services to assess the entrepreneurial qualities of the unemployed, which helps them make an informed decision on whether to grant a start-up subsidy.

Income support

In the early phase of a new business, the first clients need to be acquired. There is no or little income until after the first few clients are acquired. If the entrepreneur works on an assignment basis, at least partial payment will be received upon completion of the assignment, and not on a weekly or monthly basis as is the case with employees. The unemployment benefit or social allowance can be extended to bridge this no-income period.

Lending business capital

The banks' reluctance to grant loans to unemployed starters is a reason for the government to provide the loans. The banks' reluctance is not necessarily related to a higher likelihood of failure. Contrary to public employment services, banks do not save expenditures on benefits while the unemployed worker is self-employed. Reasons why banks might not lend capital to start-ups out of (long-term) unemployment include:

- The certainty of recovering money from (long-term) unemployed after failure is lower, due to the unemployed entrepreneur's lower chances of finding a job after business failure than regular entrepreneurs. Also, family member payback guarantees in case of failure are rarer among (long-term) unemployed starters;
- The solvability of (long-term) unemployed workers is lower. Unemployed workers are more likely to have outstanding debts that are difficult to pay back;
- The profitability of lending money to starters, and especially starters out of (long-term) unemployment is lower. A starter needs relatively small amounts compared to established firms, and the handling costs are therefore larger compared to the capital lent out. Also, part of the handling costs consist of sending repayment reminders, which is more likely if the starter has less favourable characteristics;
- The characteristics of the long-term unemployed may be perceived as being less favourable than of regular starters. Banks might be under the impression that real entrepreneurs would not be (long-term) unemployed in the first place.

For these reasons, banks may be reluctant to lend money to start-ups out of (long-term) unemployment even if the likelihood of business survival would be similar to that of regular starters. However, assessing the viability of a start-up requires expertise which bankers have, but which

⁴⁶ Van der Ende, M., M. Canoy, V. Thio, M. Chotkowski (2011), Bbz 2004: uit het startblok (Regulation on assistance for entrepreneurs of 2004: out of the starting Block), Ecorys.

family members and the government are less likely to have.⁴⁷ Therefore, the viability assessment may be outsourced to a party with proven expertise. The viability assessment is a type of consulting for which a market can emerge as it has for other types of consulting.

1.9.3 Socio-economic risks

Guidance and training

The main risk involved with guidance and training is that it prolongs the unemployment spell. The duration of guidance and training needs to be weighed against the increased chance of business survival.

Income support

Income support involves the risk that unemployed workers who start up their own business are subsidized whereas they are, in fact, self-supporting. However, it can only be determined in retrospect by monitoring monthly turnover or by checking the accounts after the financial year, whether a starter is self-supporting. Another risk of income support is that unemployed workers who start up their own business charge prices that are below cost price, as they enjoy secure income support which regular entrepreneurs cannot. So income support carries the risk of regular entrepreneurs being displaced.

Business loans

Finally, business start-ups are not always successful and the starters may fall back into unemployment. In the case of a business loan, a balance must be struck between recovering the loan and providing incentives to take up work. In the case of low-skilled workers, the financial incentives might already be too small to accept a job at a wage that is only marginally above the benefit level. If part of the wage difference is to be used to repay debts, this further reduces the incentive to take up work after a business failure. This is especially true for low-wage jobs because it takes a long time to repay the loan from low wages. An efficiency-oriented solution could be a partial debt reduction after taking up work, and an equity-oriented solution could be to rescind any remaining debts five years after the business failure.

1.10 Macroeconomic feedback

Higher labour market expenditures require higher contribution or tax rates, which increase labour costs and reduce the demand for labour, and in turn for production. Even with little knowledge about the effectiveness of measures, the macroeconomic feedback can be illustrated by means of a general equilibrium model. In this section we briefly discuss a general equilibrium analysis carried out by the Netherlands Bureau for Economic Policy Analysis in the year 2000. It is their most recent study on this subject.⁴⁸

This study considers three types of active labour market programs:

1. Relief jobs;
2. Work experience places;
3. Subsidy vouchers.

⁴⁷ Van Praag, M. (1996), Determinants of successful entrepreneurship, Tinbergen Institute PhD Thesis 107.

⁴⁸ Jongen, E.L.W, E. van Gameren, J.J. Graafland (2000), The impact of active labour market policies: an AGE analysis for the Netherlands, CPB Research Memorandum no.166.

Relief jobs are minimum wage jobs, up to 115% of the minimum wage level. Work experience places are similar but aimed at young workers. Vouchers consist of 7% of the net benefit level.

The analysis is based on the following assumptions:

1. The wage level in relief job and work experience places reflects the productivity;
2. Work experience places increase productivity by 50%;
3. For subsidy vouchers there is no deadweight loss or substitution of workers.

These assumptions seem quite optimistic, but the main purpose of the analysis is to illustrate the macroeconomic feedback. The displacement of workers is implicit in the general equilibrium approach of this study.

The analysis focuses on two aspects. Firstly, active labour market policies increase employment in low-productivity jobs at the expense of employment in regular, higher productivity jobs. Secondly, the cost of taxation to finance the measure and its impact on the labour costs, employment and production.

The study presents the outcomes of the active labour market policies for two alternatives:

1. "Automatic stabilization" or no compensating taxation;
2. "Budget neutrality" or compensating taxation.

In the first alternative, the budget deficit is allowed to increase, in the second alternative the cost of financing the labour market policies is considered. For all labour market policies, an ex ante expenditure of 0.03% of GDP is considered, as shown in the top row of Table 1.1.

Table 1.1 Macroeconomic feedback effects of three types of labour market policies

	No compensating taxation			Compensating taxation		
	Relief jobs	Work exp.	Vouchers	Relief jobs	Work exp.	Vouchers
Ex ante % of GDP	0.03%	0.03%	0.03%	0.03%	0.03%	0.03%
Tax revenues	-0.01%	0.01%	0.01%	0.03%	0.05%	0.03%
Efficiency changes	0.01%	-0.01%	0.01%	0.00%	-0.02%	0.00%
Net impact on budget	-0.03%	-0.03%	-0.01%	0%	0%	0%
%pt unemployment rate	-0.11%	-0.17%	-0.08%	-0.08%	-0.13%	-0.07%
%pt employment private sector	-0.11%	-0.06%	0.11%	-0.14%	-0.11%	0.10%
GDP	-0.11%	0.00%	0.09%	-0.16%	-0.07%	0.07%

Source: Netherlands Bureau for Economic Policy Analysis, absolute expenditures expressed as percentage of GDP.

Without compensating taxation, the expenditures on relief jobs and work experience places reduce the government budget by a similar amount in the equilibrium outcome. There is some loss of tax revenues for relief jobs since some workers are locked in the directly created low-productivity jobs. On the other hand, relief jobs create efficiency because benefit expenditures are reduced and workers in relief jobs are productively engaged.

As regards work experience places, the gain of extra young workers eventually ending up in high-productivity jobs and paying taxes is largely offset by the lock-in of other young workers in the work experience place who would have found a high-productivity job even without help.

Vouchers that subsidize regular jobs increase tax revenues and reduce benefits at the same time, at least if there is no deadweight loss or substitution of workers by subsidized workers. Because the vouchers in this scheme only apply to low-wage jobs, the risk of high-productivity workers in low-wage jobs is not affected by vouchers, contrary to relief jobs and work experience places.

If 0.03 per cent of GDP is spent on relief jobs, the unemployment rate would drop by 0.11 per cent. This huge impact is due to the low wages of relief jobs which are not that much higher than the benefit level. However, in equilibrium, this is completely at the expense of employment in the private sector, and a loss of GDP of 0.11 per cent. On top of this loss of GDP, the budget deficit increases by 0.03 per cent. If the tax rates were increased to meet the bill, this would further reduce the private sector employment by 0.03 per cent. Due to the above-average productivity in the private sector, this loss of employment will involve a more than proportionate loss of GDP: 0.16 per cent in total. This means that the loss of GDP due to relief jobs is more than five times the expenditure of 0.03 per cent of GDP involved.

As regards work experience places, the outflow into regular employment mitigates the negative impact of temporary job creation, but the loss of GDP is still more than double the expenditure involved.

Subsidy vouchers as an employment incentive have a positive impact in this study. This positive outcome is based on the assumed absence of deadweight loss and substitution of workers by subsidized workers. However, the main lesson from this analysis is that the negative macroeconomic feedback of subsidy vouchers is limited. This is because by targeting the employment incentive at low-wage job level, there is only a low risk of productive job seekers being locked in low-productivity jobs.

We can add to this study from later policy insights. Targeting the vouchers at the long-term unemployed reduces the deadweight loss risk that those job seekers would have found a job even without the subsidy. The only remaining risk is that low-wage workers are dismissed in favour of long-term unemployed with a voucher. It is exactly for this reason that this programme cost more than expected and was abandoned. For new employment incentives, a number of elements have been introduced to reduce this substitution effect:

1. The employer is required to sign a contract stating his intention of employing the new recruit for at least a year and preferably permanently;
2. 50% of the subsidy is payable after the new recruit has been employed for at least a year;
3. If an employer dismisses the worker, the employer may be denied the subsidy, especially if the dismissed worker had been recruited with a subsidy.

To conclude, there is a risk that the negative effect of higher tax rates on the general demand for labour offsets any positive effect of the measure. The measure requires a careful design to reduce the risks of deadweight loss, substitution and displacement of workers. Directly created jobs come with a further risk of an equilibrium where the directly created jobs have replaced regular jobs, and GDP drops by the production of those replaced jobs.

1.11 Conclusions

This chapter reviewed the policy rationales of passive and active labour market measures on the basis of the aims of individual measures (according to the information provided in the Eurostat LMP database), and the underlying socio-economic rationales as described in the economic literature. The risks associated with particular passive and active measures in this literature were also

discussed. This section presents the conclusions on why labour market measures should be applied and how.

Out of work income support

The first rationale for this type of measure is to provide insurance against loss of income. This is a role for the government because collective insurance is more cost-effective than private savings, because of the macroeconomic effects of lower consumer demand of the unemployed and to ensure redistribution of income. Secondly, minimum living standards and equity are strong rationales for out-of-work income support. Thirdly, out-of-work income support stabilizes the consumer demand of those who have become unemployed. In times of high unemployment, this prevents the negative cycle of less demand, less production and less employment. Fourthly, job seekers may need a financial buffer to search for a high-quality job match which lasts longer and in which employer and employee can invest more.

An important possible side-effect of out-of-work income support is the unemployment trap, i.e., unemployed are willing to work but not for the wages the employers offer. This risk is particularly relevant for the low-skilled workers, in low-wage jobs. An important target group of out-of-work income support is therefore the low-skilled unemployed, who run a particular risk of social exclusion in a society with diploma requirements for most jobs.

Early retirement

In some countries, mainly the Mediterranean countries, the rationale behind early retirement schemes is to make room for youth employment. In most countries the rationale is to facilitate inactivity of older workers, whose jobs may be at risk or who are hard to place if unemployed, rather than spending on possibly ineffective activation. According to economic literature, early retirement reduces overall employment, so that early retirement is a costly measure and a waste of manpower in a decreasing labour force.

Many countries have reduced or abolished early retirement schemes, or are considering doing so. In these cases, alternative exit routes for early retirement, such as unemployment or disability, should be closed off as well to truly create a work-inducing social insurance system for older workers. However, a side effect of reducing or abolishing early retirement is the negative interaction with reforms to reduce employment protection. The combined effect of both reforms could be that employers replace older workers with lower-wage workers. In that case the logic of supply and demand implies that older unemployed would need to accept lower wages.

Governments can influence this decision through various policies. Lower benefit levels are an option, but not necessarily the best way to achieve this because of the drawbacks of reduced consumer demand and insufficient private savings. In principle, a shorter maximum unemployment benefit duration forces older workers to look for lower-wage jobs sooner and avoid long and negative benefit dependence. Ideally, a structure where wages increase less with age or tenure would address the acceptance of lower-wage jobs by older unemployed workers at the source. Although this is beyond the direct influence of the government, reduced employment protection may eventually result in an equilibrium with flatter wage profiles. All in all, there is no quick way out of the negative consequences of reduced employment protection without the early retirement option. But countries that postpone the abolishment of early retirement could use the time this buys to cushion the worst effects of reduced employment protection on older workers.

Labour market services

Labour market services consist of information services, as well as counselling and guidance and the administration of other labour market measures. Information services reduce the costs of job search. New social media may further reduce job search costs, although social media might be less accessible to disadvantaged groups. Information services also improve the transparency of the labour market to enhance the effectiveness of guidance and counselling. Administration is regarded as a necessity to effectively implement labour market measures. It may include job search monitoring, or referring job seekers to programmes. Some countries assess the ability of the unemployed to find a job without help in order to improve the effectiveness and efficiency of active measures. According to literature, guidance and counselling should be adapted during the business cycle, with more focus on guidance to jobs possibly in new sectors or occupations and less focus on monitoring in times of high unemployment.

Training

Most training aims to improve the skills of unemployed workers, although improving the occupational mobility of workers is an important second objective, especially in countries that spend a large portion of GDP on training. The rationale behind the State providing training to improve skills rather than employers is debated in the economic literature. A key argument for the role of the State is that trained skills are recognized by all employers. Training to improve the occupational mobility of workers is particularly relevant in times of high unemployment, when people lose jobs in unviable occupations. Subsidized training of employees is rare and is associated with the specific risk of a skills trap: employees may expect higher wages, while employers might sooner replace them with unemployed workers than pay higher wages.

Employment incentives

Employment incentives imply partly subsidized jobs. A rationale for providing employment incentives is that lower numbers of people in certain groups of job seekers are hired, risking social exclusion. This measure is often targeted at the long-term unemployed to prevent discouragement to seek jobs and to reduce the deadweight loss risk of subsidizing jobs of unemployed who would have found a job even without the subsidy. From this perspective, the job seeker is primarily responsible for finding a job, but increased support is offered by the State as the chances of finding a job diminish as the unemployment spell persists. The measure is particularly suitable when the number of long-term unemployed starts to increase, which is typically in the second year after the start of a crisis. A variation on this measure is incentives to convert temporary contracts into permanent contracts to combat the exclusion of (young) workers from permanent contracts.

To be effective, employment incentives need to be targeted at specific groups, since the costs of the contributions would otherwise offset the income gain of a general wage subsidy. For this reason employment incentives would not be suitable for increasing labour participation of women, constituting half the population. Although beyond the scope of this study, it is more appropriate to address potential disincentives for female labour supply in the tax-benefit system, for example the transferability of the tax-free threshold of the non-working spouse to the working spouse.

Direct job creation

Directly created jobs offer meaningful activities to the unemployed and valued services to the community. However, these jobs should not compete with regular jobs since displacement of regular jobs by subsidized jobs would be costly and reduce opportunities for outflow into regular jobs. Therefore, direct jobs should be non-market jobs requiring skills for which there is no regular demand, at least not above the minimum wage. These are typically low-skilled and less attractive jobs. Directly created jobs can even be cost-effective if offered to a small selection of beneficiaries

suspected of having informal work, if the majority rejects the job and their benefits are then terminated.

Supported work and rehabilitation

Most expenditures on supported work and rehabilitation are on sheltered work which offers meaningful activities in an adapted work environment for the disabled. Outflow into a regular job is generally regarded as a bonus rather than an objective for sheltered work. Rehabilitation seeks to overcome barriers of employers to recruit disabled workers, through customized versions of other measures, specific measures such as job coaching or workplace adjustments or a packaged combination of measures, but also in the form of employment incentives. It may be doubted that financial incentives alone could overcome employers' fears of slower work, sickness leave and renewed disability. Temporary work might overcome such fears, as the employer gets to know and hopefully appreciate the disabled worker: job coaching or training in regular jobs, with more relaxed employment protection.

Start-up incentives

Start-up incentives require a package of guidance, training, income support and business capital loans. Such a full-blown package is costly and the economic rationale is to offer start-up incentives only selectively to unemployed workers with the best business prospects. Since business prospects deteriorate in times of crisis, start-up incentives seem most applicable when the economy improves.

A side effect of turning employees into self-employed people is that fewer workers are covered by social protection. One rationale for non-coverage of the self-employed is that unemployment is not a risk beyond the influence of the self-employed worker. Another rationale is that a self-employed worker with fewer commissions still has some income as opposed to a fully unemployed regular worker. Whether new types of self-employment warrant adjustments of social protection is under debate.

Macroeconomic feedback

There is a risk that the negative effect of higher tax rates on the general demand for labour offsets a positive effect of active measures. This requires a careful design of measures to reduce the risks of deadweight loss, substitution and displacement of workers. The risk of deadweight loss can be reduced by targeting measures at the long-term unemployed, since they have proved they cannot find a job without help. Requirements for employers can help reduce the risk of workers being substituted by trained or subsidized workers. Displacement of workers in other companies tends to occur gradually in a path towards a new equilibrium. The risk of displacement is particularly high for directly created jobs. The costs involved in directly created jobs are not only the wages, but more importantly the loss of production as compared to a regular and typically more productive job.

In summary

Passive labour market measures have clear social rationales. State involvement in those measures is justified by efficiency reasons. Passive measures play an important part in maintaining consumer demand and they can thereby act as an economic stabilizer in times of crisis. On the other hand, passive measures also entail economic inefficiencies that may increase unemployment, especially amongst low-skilled workers.

Active labour market measures aim to address market failures and to provide a more level playing field by supporting weaker groups, notably low-skilled workers. Common threats to their effectiveness include deadweight loss (the unemployed would have found a job even without help), substitution of other workers within the company or displacement of workers in other companies.

These issues are particularly difficult to address in the case of directly created jobs and employment incentives.

The rationale for most measures does not depend on the business cycle in general, but the most appropriate focus on specific measures within the broader categories does depend on the phase of the business cycle. Training of unemployed workers who lost their jobs in unviable professions is most relevant shortly after job loss, at the start of a crisis. Employment incentives for recruiting long-term unemployed are particularly suitable when a crisis deepens in the second year. Start-up incentives are particularly suitable when the economy picks up again. And job search monitoring is most suitable in times of economic growth.

2 Expenditures and participants of labour market policies: trends and relationships with economic variables

2.1 Introduction

The key questions addressed in this chapter are:

1. What are the overall expenditure trends since 1990?
2. What variations can be explained by the business cycle?
3. What variations can be changed by changes in the approach?
4. How do large breaks in expenditures coincide with major changes in approach: broader or narrower target groups / eligibility criteria and changes in generosity or duration?
5. To what extent do measures act as communicating vessels (e.g., more dependency on social assistance instead of unemployment benefits)?
6. How does performance on social equity (Gini-coefficient) and income support (share of households below the poverty line) correlate with expenditures on labour market policies?

This chapter captures trends in expenditures and costs per participant in both active and passive labour market measures in the EU Member States and relates those to notable policy changes and cyclical variations. Thus, it seeks to provide an analysis on how and why labour market interventions changed over time in terms of volume and composition. We combined Eurostat data on expenditures compiled since 1997 and later, depending on the country, with OECD data for preceding years starting from 1985, to construct longer time series. The expenditure patterns and participant levels are examined both at an aggregate level, as well as per group of countries with common characteristics. Developments in individual countries are commented on where deemed relevant and based on broad overview tables in the second last section.

2.2 Description of data

The Eurostat data pertains to the EU-27 countries. The earliest Eurostat data on ALMP measures goes back to 1997. For the acceding countries of 2004 and 2007, the Eurostat data commences around those years. The years 1997-2009 cover a period of mild crisis in the first decade of the 21st century, but not the deeper crisis some countries experienced in the early 1990s. For a sound analysis of labour market policies throughout the business cycle, we augmented the Eurostat data with OECD data. The OECD data is available from 1985 or later for the OECD countries, which include amongst others all EU-15 countries, the Czech Republic, Hungary, Poland and Slovakia. At the time of the analysis, the OECD data was also available up to and including 2008. By combining the OECD and Eurostat data we have constructed a master database with time series of different lengths for different countries.

Making data comparable within countries

Before analysing the data, it needed to be made comparable between years within a country, and also between countries. Comparability of data between years is necessary to avoid trend breaks. The main trend breaks and solutions within countries are:

- Expenditures: revaluations. For example, in Romania expenditures on training amounted to 195 billion leu in 2004 and 39 million new leu in 2005. We converted all monetary data from national

currencies into euro values. The euro was formally introduced in 1999. We used the 1999 euro exchange rates for all years prior to 1999;

- OECD and Eurostat classifications. Eurostat adopted the OECD classification of measures in 1997 in broad lines but modernized the detailed classification of measures. In 2002 OECD in turn adopted the detailed Eurostat classification and reconstructed their historical database according to the Eurostat classification, with a few exceptions. This means that for some countries where we use OECD data up to 1996 and Eurostat data as from 1997, a minor trend break occurs between 1996 and 1997. In those cases we scaled the pre-1997 OECD figures up or down to the 1997 Eurostat figures;
- For Germany, most pre-1991 statistics refer to former West-Germany, whereas statistics for Germany since 1991 include former East-Germany. Figures on employment, population and GDP including former East-Germany are available for 1985-1990, but not for expenditures on labour market policies. Therefore, for 1985-1990 we compared labour market expenditures to GDP exclusive of East-Germany.

Annex 2 contains figures of expenditures as a percentage of GDP per country and category of measures. Data on numbers of participants is needed to describe the costs per participant. This data is described in Section 2.17.

2.3 Overall expenditures on active and passive measures

General trends

Using the Eurostat LMP database, we present in this chapter expenditures on various active and passive measures over time and for different country groups. Active labour market policies include the categories Public Employment Services and Administration; Training; Job Rotation and Job sharing; Employment Incentives; Supported Employment and Rehabilitation; Direct Job Creation; and Start-up Incentives. Passive labour market policies include expenditures captured in the categories Out-of-work Income Support; and Early Retirement.

If all available data on expenditures on both active and passive labour market policies is aggregated for the current EU-27 level, we note that the range of total spending is between 1.6 per cent and 3.1 per cent of total GDP (Figure 2.1). Between 1989 and 1993 expenditures have been growing steadily, but from 1993 we can conclude a downward trend. Despite some moderate growth in spending in the period 2001-2003, the peak of 1993 was never reached again. This pattern seems consistent with the macroeconomic business cycle of the respective period (see also the unemployment rates in Figure 2.8), although a certain time lag can be seen. Consequently, expenditures increased in the first few years after the fall of the Berlin Wall and the corresponding recession, and then dropped as the economy picked up. Around 2001, during the second recession in Europe between 1985 and 2008, we observe a slightly upward spending trend, which, however, has reversed drastically since 2004. The years 2007 and 2008 record the lowest point in overall expenditures on labour market policies in the EU at 1.6 per cent of GDP. In 2009, when the intensity of the economic crisis resulted in serious labour market contractions, we see a sharp rise in overall labour market expenditure, which jumps to 2.2 per cent of GDP, corresponding to the 2002-2004 level.

Distinguishing between expenditures on active and passive labour market policies shows that until 1994 both patterns developed in line with the overall trend, with spending on unemployment benefits and early retirement amounting to slightly less than double the spending on active labour market policies. Subsequently, until 2000, the fall in spending on passive measures is sharper than spending on active measures. In fact, for the period 1992-1999 ALMPS display a rather steady

level, and in 2000 spending on active and passive policies is closest to each other, with a difference of 0.3 percentage points. From 2001/2002, in line with the recession and the corresponding rise in unemployment levels, expenditures on passive labour market policies start rising again but expenditures on active measures decrease further. The trend of lower expenditures on active policies in the 2000-2004 recession contrasts strongly with the trend of increasing expenditures on active policies in the 1990-1993 crisis. Between 2004 and 2008 expenditures on passive measures decrease again as the economy picks up, and in 2008 active and passive measures are at nearly equal levels again. However, in 2009 expenditures on passive and active measures diverge again, as expenditures on passive measures increase sharply from 1.0 per cent of GDP in 2008 to 1.4 per cent in 2009 and expenditures on active labour market policies increase only marginally, from 0.65 per cent to 0.77 per cent. Also in other parts of the world the effect of the crisis is apparent in 2008 or 2009. In the US, expenditures on passive measures skyrocket from 0.3 per cent of GDP in 2007 to 0.8 per cent in 2008 and 1.0 per cent in 2009 while active measures play a minor role (0.11% in 2007, 0.15% in 2008 and 2009). Japan sees more modest increases for passive measures, from 0.3 per cent in 2007 and 2008 to 0.5 per cent in 2009, and active measures increase from 0.2 per cent in 2006 and 2007 to 0.3 per cent in 2008 and 2009.

The general conclusion that can be drawn from the general trends is that on the one hand expenditures on passive policies depend on the business cycle, increasing during every crisis and decreasing as the economy picks up. On the other hand expenditures on active policies depend on political decisions, sometimes increasing and sometimes decreasing during a crisis.

Figure 2.1 Aggregate expenditures on LMPs, 1985-2008



Source: OECD (1985-1997) and Eurostat (1998-2009) LMP database, calculations by Ecorys.

1985: AT, BE, DE, ES, FI, FR, EL, IE, LU, NL, SE, UK (12 countries);

1986-1989 including also DK, PT (14 countries), 1990 including also IT (15 countries);

1991 also CZ, PL, SK (18 countries), 1992-1999 also HU (19 countries), 2000-2002 also EE (20 countries);

2003 also LT, LV, RO, SI, (24 countries) 2004-2005 also BG (25 countries), 2006-2009 all EU-27 countries.

Country group trends

Given the differences in data availability for different countries, as well as taking into account geographical and economical factors, a more differentiated approach towards examining trends in expenditures is to divide the Member States into five distinct groups: Continental (Group 1: Austria, Belgium, France, Luxembourg and Germany); Nordic (Group 2: Denmark, Sweden, Finland, the

Netherlands); Mediterranean (Group 3: Spain, Greece, Italy, Portugal); Anglo-Saxon (Group 4: United Kingdom, Ireland) and New Member States from the 2004 and 2007 enlargement rounds (Figure 2.2 depicts the aggregate expenditure on labour market policies for each of those groups expressed as a fraction of the total GDP at the EU level. Figure 2.3 expresses the expenditure in terms of the GDP of the respective group. The first expression (Figure 2.2) points towards share and volume of expenditures on labour market policies compared to the other groups, whereas the second (Figure 2.3) aims at capturing the level of generosity of the policies and is better suited to show group-specific trends.

Figure 2.2 Aggregate expenditures per country group, in percentage of total EU GDP

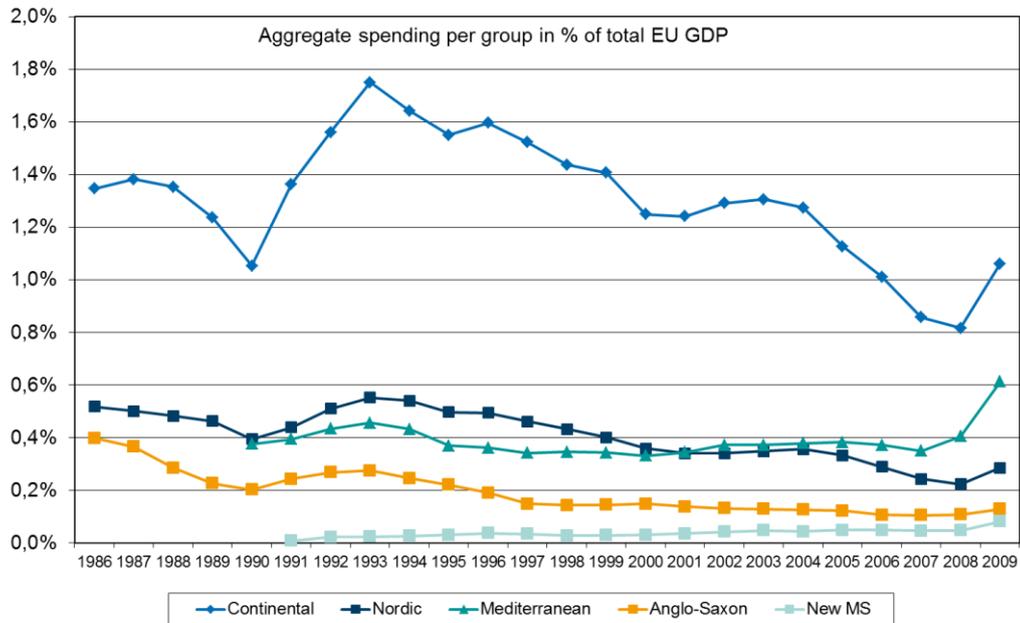
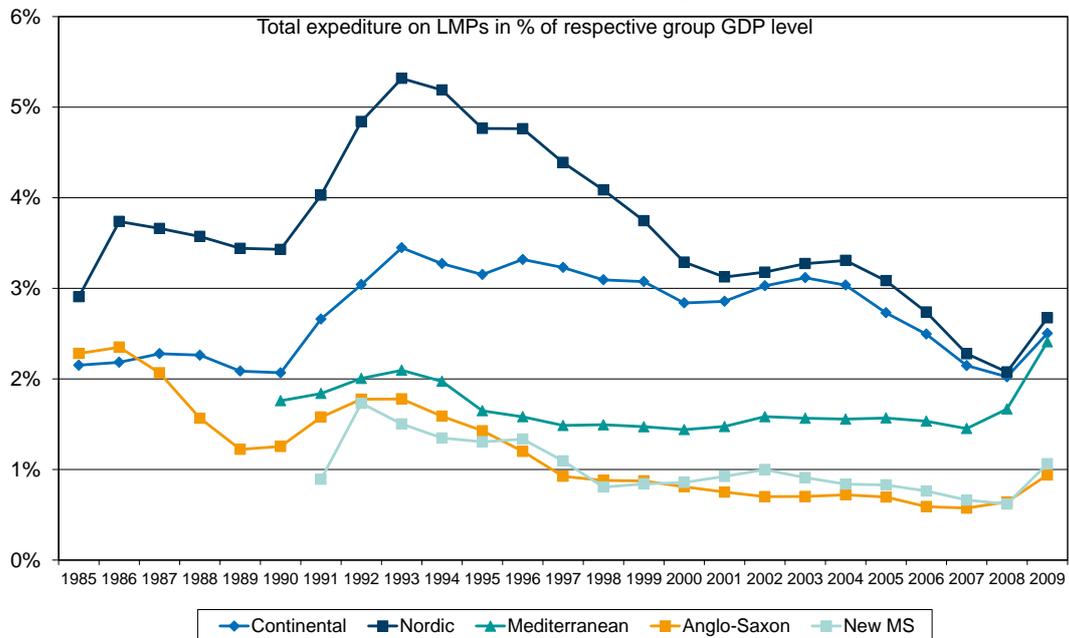


Figure 2.3 Aggregate expenditures per country group, in percentage of group GDP



The charts show that the Continental group of countries has the highest share of total EU expenditure on labour market policies, which amounted on average to 1.3 per cent of total EU-GDP (Figure 2.2), showing the magnitude of the Continental economies and labour markets within the

EU. At the same time, the expenditures of the Continental group expressed as a fraction of the GDP generated at the group level are comparatively stable around the 2.7 percentage average for the whole period (Figure 2.3). There are three most notable breaks in total expenditure on labour market policies for this group. The first one occurs in the period 1989-1993 and can be attributed in particular to the drastic rise in spending in Germany after the reunification. After 1993, expenditures display a continuous falling trend up until 2001, when a second recession period affects this group. In the period 2001-2003 the countries of the Continental group increase spending on labour market policies from 2.8 per cent of their GDP to 3.1 per cent. Since 2005 expenditure has been dropping again, both expressed in terms of total GDP at EU level, and of GDP at the group level. Effects of the recession starting in 2008 are clearly visible for 2009, when expenditures not only rise substantially as expressed at the group level, but also accounted for much of the total increase at the EU-level.

The Nordic countries, which form Group 2, are the second largest spender on labour market policies within the EU, coming third after the Mediterranean countries since 2002. Compared to the level of the GDP within the group, it is evident that they attribute substantially more resources to labour market policies than the rest of the EU members. The cyclical effects are evident for this group too, with a strong increase in spending in the early 1990s as Scandinavian countries are hit hard by the crisis, followed by a decline in the mid-1990s as the situation on the labour markets improve. Similar to Group 1, there is a second increase in spending following the 2001 recession, yet in this case it is less pronounced. A possible explanation for this trend is the significant emphasis on activation policies in the Nordic countries, which might have been effective in getting people into jobs. In general, we observe a strong trend to decrease overall expenditures on labour market policies for this group, so that spending never regains the peak it reached during the crisis in the early 1990s. At the group level, Nordic countries' expenditure on labour market policies increases sharply between 2008 and 2009 from 2.1 per cent to 2.7 per cent of GDP.

The Mediterranean group of countries includes Spain, Portugal, Italy and Greece. Data on Italy is only available from 1990 onwards; therefore, we cannot examine in detail the spending pattern of this group during the recession of the early 1990s. Looking at disaggregated data for the other countries of the group, we can see that Spain spends around 3 per cent of its GDP on labour market policies before 1990, yet in 1993 the overall spending already amounts to 3.9 per cent. A similar rise in expenditures is observed in Portugal, where the expenditure level rises from 0.5 per cent of GDP in 1989 to 1.1 per cent in 1992 and 1.4 per cent in 1994. No changes in expenditure can be seen for Greece. The overall trend from the 1990s onwards shows that Group 3 spends on average around 0.4 per cent of total European GDP on labour market policies, and about 1.7 per cent of the GDP at the group level, thus resulting in moderate expenditures compared to the Continental and the Nordic countries. Since 1993 expenditures on labour market policies in the Mediterranean countries are remarkably stable, with only slight increases in 2002 and in 2008. In 2007, labour market policies consume 1.5 per cent of GDP at the group level, yet by 2009, with the intensification of the latest recession, expenditure has risen sharply to 2.4 per cent.

The Anglo-Saxon group consists of the UK and Ireland. The flexible rules around the labour markets in these countries, as well as their traditionally lower levels of overall public spending, provide an explanation for the relatively restricted resources attributed to labour market policies throughout the 1989-2009 period. Despite this fact, in 1985-1989 the UK spends a substantial budget on public employment services. The expenditure pattern does not seem to display the same strong reaction to macroeconomic trends as is evident in the previous three groups. In particular, as regards the early 1990s, spending on labour market policies in UK and Ireland already stagnates in 1992. This trend actually holds true for almost the entire observation period in Ireland, where the share of GDP on LMPs continues to drop each year, from 4.4 per cent in 1985 to 2.1 per cent in

2008, so more than half. The only - yet substantial - noticeable break in this pattern is between 2007 and 2009. As one of the first countries to be affected by the global economic crisis, Ireland experiences a massive growth in unemployment, which explains the rise in expenditures from 1.6 per cent to 3.5 per cent, which is more than double, of the country's GDP for that year only. UK does not show a similarly strong reaction, with spending increasing only marginally from 0.5 to 0.7 per cent of GDP between 2007 and 2009.

The fifth country group of new Member States, albeit the largest in number, actually spends the least of all EU Member States as measured as a share of Europe's GDP - on average 0.04 per cent of EU's GDP. This is not surprising, given the lower GDP per capita of the new Member States and also the smaller population as compared to the EU-15. At the same time, the group spends largely similar proportions of its GDP as the Anglo-Saxon countries, so about 1.0 per cent of GDP at the group level. Data is available from 1991 onwards for four countries: the Czech Republic, Hungary, Poland and Slovakia. Therefore, an analysis of trends in expenditure on labour market policies before the early years of the first decade of the 21st century should be considered with caution. Nonetheless, we can conclude a sharp increase in expenditure in the early 1990s, which can be attributed directly to the collapse of the communist economies followed by a severe economic crisis and the lack of adequate policies to address unemployment caused by the restructuring of the economy. No further breaks in expenditure can be detected at the group level. Data for 2009 reveals that the economic crisis is seriously impacting employment in the new Member States, causing total expenditure on labour market policies to increase from 0.6 per cent of GDP to 1.1 per cent. This is especially affecting Poland and the Baltic countries Estonia, Latvia, Lithuania, and Slovenia.⁴⁹

Active versus passive labour market policies at the group level

In the previous section, the analysis of spending on active versus passive labour market policies at the overall EU level showed that until the early 1990s there was a clear emphasis on passive measures, which, however, became less pronounced in the years thereafter. Between 1994 and 2003 a roughly constant share of 0.9 per cent to 1.0 per cent of GDP was devoted to active measures. These figures do not fully reflect the attention paid to active policies, as the 1990s saw reforms to increase the activation requirements of passive policies. Expenditure on active policies started declining slightly in 2000, when direct job creation was wound down in East Germany, Poland and Sweden. From 2001-2004 spending on passive measures increased due to the recession but spending on active measures continued to decline and in 2008-2009 spending on active measures showed a limited upward reaction as compared to the strong increase of spending on passive measures. The following section therefore seeks to examine closer trends at the group level.

Figure 2.4 shows the expenditure patterns for each of the five country groups at the level of active and passive labour market policies.

⁴⁹ However the 2009 figure for training in Poland was revised in March 2012, resulting in a less pronounced increase for Poland and hence the aggregate for new Member States. The impact of this revision at the EU level is minimal. The results in this report refer to figures before the revision of the 2009 figure for Poland.

Figure 2.4 Spending on active vs. passive LMPs Groups 1-5, % of respective group's GDP

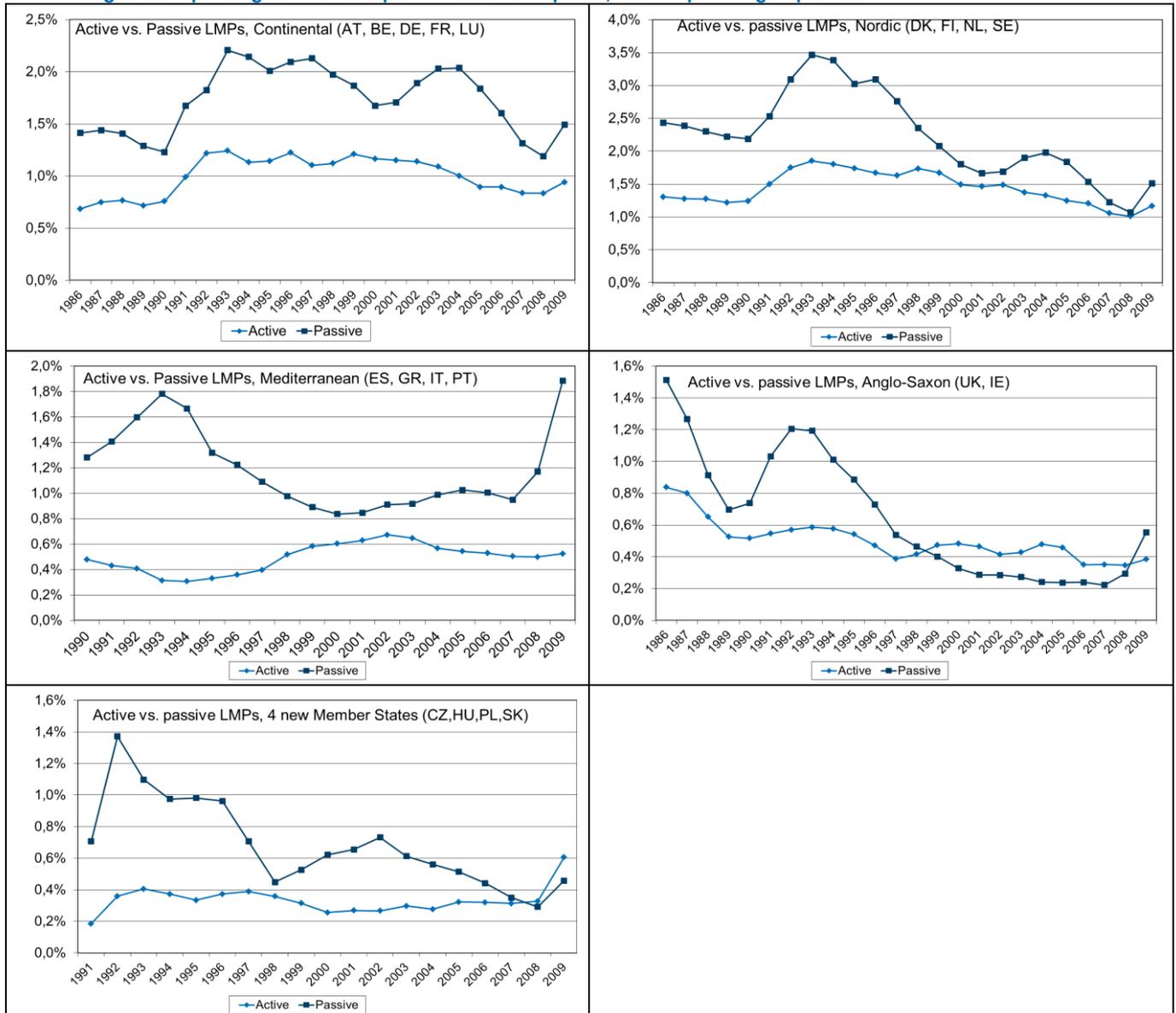


Figure 2.4 shows that the development of active and passive measures was very different for each country group. For the Continental group we see that expenditures on passive measures are usually a fraction higher than expenditures on active measures, although in times of crises expenditures on passive measures increase more sharply, with peaks in 1993 and in 2004. The year 2005 marks a strong decline in expenditures on passive measures. This is probably a combined effect of the economic recovery and the Hartz IV reform which was introduced in 2005. This reform was the fourth main element of the fundamental labour market reforms of the Schroeder government in Germany. Hartz IV introduced substantial reforms of the unemployment and social assistance benefits, merging the two and integrating active policies as components within passive measures. Between 2008 and 2009, expenditure on passive measures in the Continental group rose by about 0.3 percentage points to 1.5 per cent of GDP, while spending on active measures rose by only 0.1 percentage points to 0.9 per cent of GDP.

Of all country groups, the Nordic countries of Group 2 spend the highest total share of their GDP on labour market policies from all country groups. Figure 2.4 clearly shows that the recession of the early 1990s led to massive increases in expenditures on both categories, as the banking crisis and the decline in the trade with former Soviet Union caused unemployment to skyrocket in the

Scandinavian countries. Unemployment also increased significantly in the Netherlands. Since the mid-1990s spending on passive measures has fallen sharply, yet activation policies remain far less volatile, although spending on those policies is also falling. One explanation here is the fact that Denmark was among the first countries to introduce large-scale reforms in favour of ALMPs that placed emphasis on participation in labour market programmes, strengthening of work incentives and a decentralization reform of public employment services. Sweden followed the Danish example some years later, and in 2001 it introduced another unemployment insurance reform with which it re-affirmed the emphasis on active labour market policies. A certain cyclical effect can be observed around the recession of 2001, with spending on passive measures rising particularly in the Netherlands. It is interesting to note that expenditure on both active and passive policies was at the same level (1.1 per cent of GDP in 2008), but for 2009 passive measures received 1.5 per cent of GDP, whilst expenditures on active measures increased by only 0.1 percentage points.

Figure 2.4 also depicts the expenditure patterns for the group of Mediterranean countries. A first observation is that ALMPs gained in importance only after the crisis in the early 1990s. In 1993, expenditures on active measures were at their lowest for the entire period, and in the same time spending on passive measures was higher than in any other observed year. How spending on active and passive measures compare to each other, depends partly on how the “mobility list” scheme in Italy is classified. This scheme consists of an unemployment benefit of which 50% of the remainder of the benefit up to the maximum benefit duration can be used as a recruitment incentive. This measure had the second-largest expenditures in Italy in the 1990s, after early retirement. Expenditures on the mobility list scheme are not broken down into passive and active parts and is classified as a whole as a passive measure.

In the group of Mediterranean countries, spending on active measures started to accelerate in 1998, mainly due to increased expenditure in Italy for the categories training, employment incentives and direct job creation. It must also be noted that in 1993 and 1994 Spain introduced major labour market reforms, which not only decreased spending on passive measures, but also placed more emphasis on flexibilizing and deregulating the labour market and decentralizing PES. At the same time, this group does not differ from the other groups: its unemployment benefits respond rather quickly to both recessions (the one starting in 1990 and the one in 2008) with expenditures on passive measures rising drastically between 2008 and 2009.

As explained above, Anglo-Saxon countries are characterized by flexible labour market rules and high employment rates. Still, expenditure on passive measures increased substantially around the recession of the early 1990s, and the effect of the 2008 economic crisis was also felt earlier than in other country groups (Figure 2.4). As a percentage of GDP, expenditures on ALMPs in fact declined virtually during the entire 1986-1997 period. At the end of the 1990s, the Labour government in the UK introduced its New Deal reforms that emphasized training and subsidized employment, but expenditures dropped again after the year 2000. In contrast with the UK, Ireland has continuously devoted a high share of spending on ALMPs (around 1%) since the 1990s, placing particular emphasis on training schemes. For the Anglo-Saxon countries, this caused overall expenditures on active policies between 1998 and 2008 to be higher than those on passive policies, but the latest recession has put an end to this trend. As a result, spending on passive measures amounted to 0.6 per cent of GDP in 2009 and to 0.4 per cent for ALMPs.

Data on the new Member States is more difficult to interpret due to the data availability issues as mentioned above. Figure 2.4 shows that the recession of 2001 had an effect on employment levels and thus on passive measures in particular, yet it must be noted that many of the new Member States were still in the process of welfare reforms at that time, and by and large their economies were more vulnerable to such events. The fraction of GDP spent on active measures has been

fairly stable since 1992, varying between 0.4 per cent in 1992 and 0.3 per cent in 2001. The fact that expenditures on active measures have increased in the new Member States since 2001 while they have declined in the old Member States can largely be attributed to the influence of EU policies and funding in this field through instruments such as the European Social Fund. Nevertheless, expenditures on active measures in the new Member States are lower as compared to GDP than in other EU-27 countries, so the increase of spending on active measures since 2001 could be seen as a sign of convergence. Also, spending is lower as compared to the 1992 peak, which puts the post-2001 spending levels on active measures in the new Member States into historical perspective. Poland has the lion share of expenditures in the new Member States, with over 40 per cent in 2008 for passive measures and over 60 per cent in 2008 for active measures. In 2008 spending on active and passive measures was almost equal at about 0.3 per cent of GDP. In 2009 active measures received a higher increase in spending than passive measures; however a large share of the increase of active spending in the new Member States in 2009 took place in Poland.⁵⁰

Before discussing expenditures per person wanting to work and expenditures trends on the various types of measures, Table 2.1 presents a brief overview of the distribution of the expenditures. The table shows that out-of-work income support has the lion's share of expenditures on labour market policies. In the 1980s roughly 60 per cent of all labour market policy spending was devoted to out-of-work income support. In the late 1980s the share of expenditures on active measures from training to start-up incentives began to increase, from 21 per cent in 1985 (12 countries) to 29 per cent in 1990 (15 countries). In the early 1990s the total budgets increased, from 2.0 per cent of GDP in 1990 to 3.0 per cent of GDP in 1993, as the unemployment rates steadily increased in those years. From 1993 to 2008 there was a general downward trend of total spending. Two shifts can be seen within the lower budgets, one from early retirement and training to labour market services and another from direct job creation to employment and start-up incentives. The first trend indicates that increasing importance was attached to (effective) job placements while the second trend suggests a policy shift from jobs provision to incentivizing regular job matches. However, despite increasing focus on effectiveness and incentives, out-of-work income support has always remained the biggest spending category within the labour market policies.

Table 2.1 Share of expenditures on types of measures in the EU, selected years (in current euro values)

	1990	1992	1993	2000	2008	2009
Total passive	64%	64%	68%	57%	58%	64%
Out-of-work income support	56%	54%	58%	53%	54%	60%
Early retirement	8%	10%	10%	4%	4%	4%
Total active	36%	36%	32%	43%	42%	36%
Labour market services	8%	6%	6%	9%	12%	11%
Training	15%	14%	13%	14%	11%	11%
Job rotation and job sharing	0%	0%	0%	0%	0%	0%
Employment incentives	4%	4%	4%	7%	7%	6%
Supported employment and rehabilitation	5%	4%	3%	4%	5%	4%
Direct job creation	4%	7%	6%	8%	4%	3%
Start-up incentives	1%	1%	0%	1%	3%	2%
N countries	15	19	19	19	27	27
Unemployment rate	8.0%	8.8%	10.2%	8.8%	7.3%	9.0%
Share of GDP spent on LMP	2.0%	2.8%	3.0%	2.1%	1.6%	2.2%

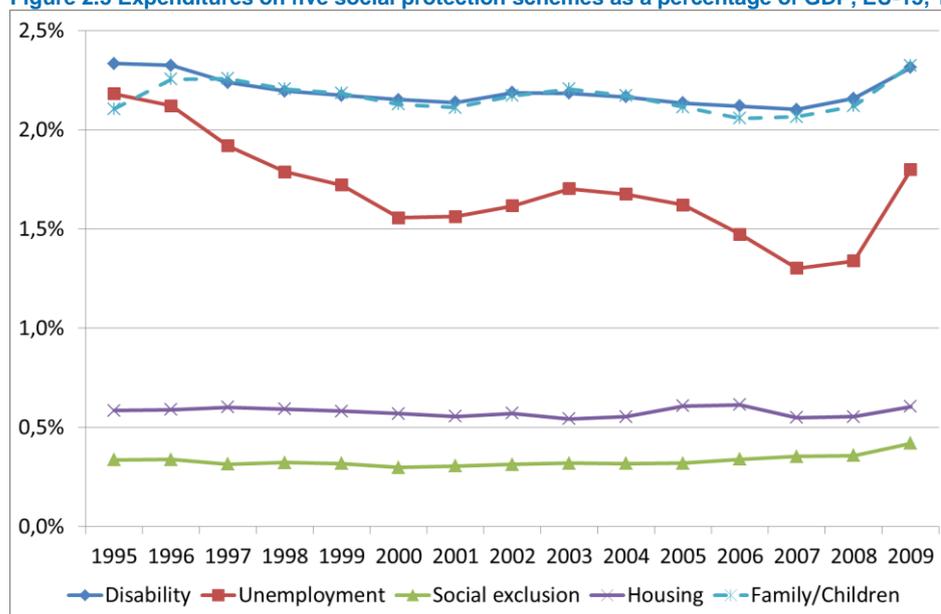
Source: Eurostat data (LMP database and Labour Force Survey).

⁵⁰ This remains the case with the downward revised figure for training in Poland in 2009.

A second notable feature is the reaction of out-of-work income support to accelerating unemployment rates, with the largest increase in unemployment rates in 1993 (+1.4% point) and in 2009 (+1.7% point). Not only did the total LMP expenditures increase in those two years, but so did the share of the LMP expenditures devoted to out-of-work income support, which increased from 54 per cent to close to 60 per cent. In broad lines, therefore, expenditures depend on both the business cycle and policy views and passive measures are more countercyclical than active measures.

We also investigated whether the trend of decreasing spending on unemployment benefits was accompanied by increasing expenditures on other social protection schemes apart from labour market policies, however this does not appear to be the case as Figure 2.5 shows. The categories do not correspond exactly with the labour market policy classification because certain social exclusion measures are a labour market policy in some countries and not in others, depending on requirements for seeking and accepting jobs. Nevertheless, the figure confirms the general pattern of decreasing out-of-work income support, without corresponding increases in other forms of social protection. Figure 2.5 also shows that contrary to 1995, out-of-work income support is no longer one of the largest spending categories within social protection, not even in 2009 when spending on out-of-work income support sharply increased.

Figure 2.5 Expenditures on five social protection schemes as a percentage of GDP, EU-15, 1995-2009

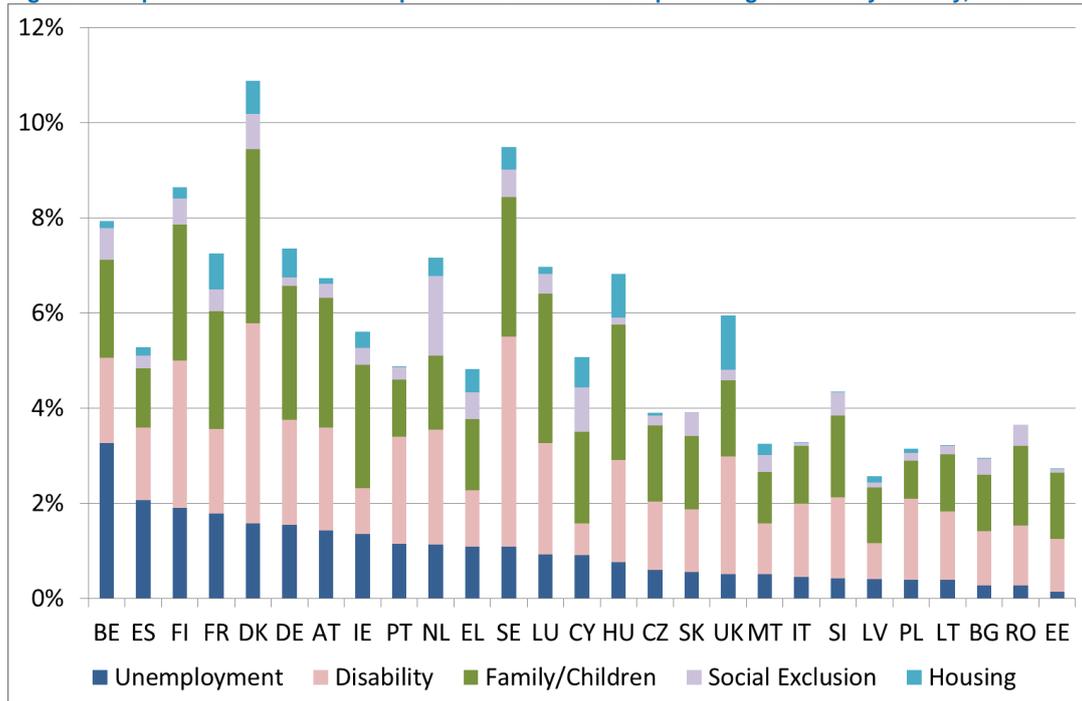


Source: Eurostat, ESSPROS.

Although the decrease of expenditures on passive labour market policies in the 1990s and the first decade of the 21st century did not translate into higher spending on other categories of social protection outside the scope of labour market policies, in some countries low expenditures on passive labour market policies are compensated by other forms of social protection. Figure 2.6 illustrates this for 2007, chosen as a recent year but prior to the 2008/2009 crisis. Expenditures on disability benefits and on family/children allowances tend to be more similar between countries than expenditures on unemployment benefits, which partially bridges differences between countries. But social exclusion receives particular attention in the Netherlands and Cyprus, as do housing allowances in Hungary and the UK. Despite these partial compensations, Nordic countries have the most generous social protection system, followed by the Continental countries. It is interesting to note that when disability and family allowances are included, Anglo-Saxon countries are more generous than Mediterranean countries. Among the old Member States, Denmark and Italy spend

the most and the least respectively on social protection and among the new Member States, Hungary and Estonia/Latvia spend the most and the least respectively.

Figure 2.6 Expenditures on five social protection schemes as a percentage of GDP by country, 2007



Source: Eurostat, ESSPROS.

A recent report by the Social Protection Committee⁵¹ shows that after expenditures on unemployment benefits rose sharply in 2009 as shown in Figure 2.5, expenditures on social assistance increased in a few countries in 2010 and 2011, notably the Netherlands, Sweden, Hungary, Estonia and Czech Republic. The report offers the explanation that unemployed workers lose benefit entitlements after the unemployment spell lengthens, and conclude a risk of permanent loss of skills. One can add to this that the extent of this risk likely depends on the generosity of social protection and job search requirements for social assistance. For example the risk of permanent loss of skills due to low job take-up from social assistance would be larger for Hungary than for Estonia because disability, family and housing allowances in Hungary are fairly generous and come without job search requirements. The same applies to Sweden compared to the Netherlands, although the differences between the two countries are relatively smaller.

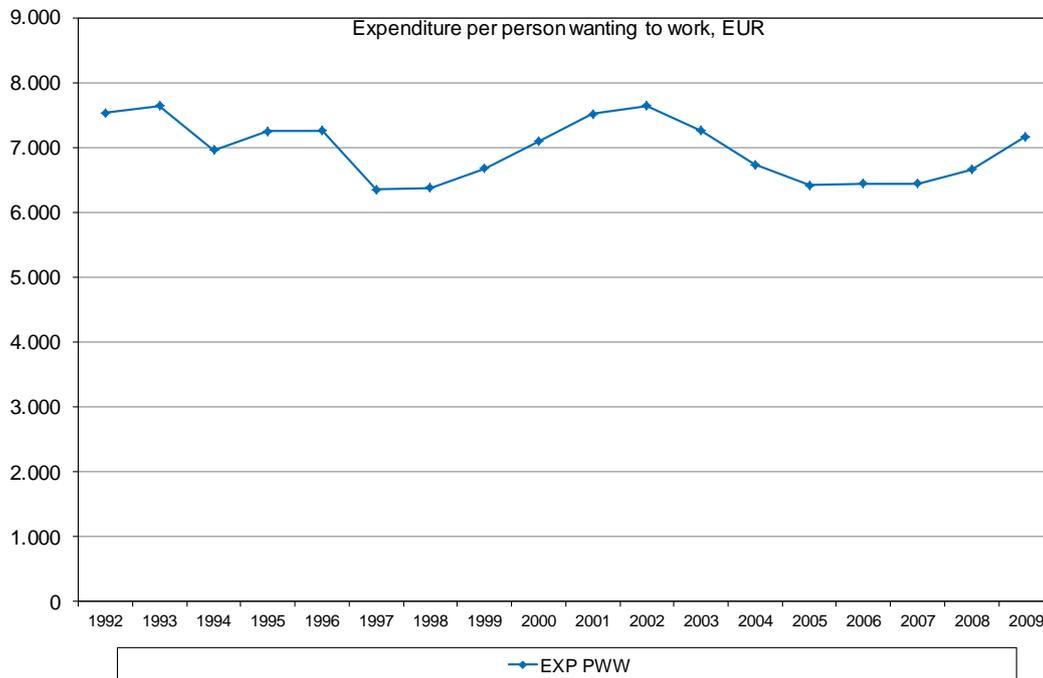
2.4 Expenditures per person wanting to work

Next to calculating the expenditures as a percentage of GDP, the costs of labour market policies per person wanting to work were examined. People wanting to work are registered unemployed as well as those who would like to work but are currently not actively seeking employment, and are not listed in the unemployment registry. Data on numbers of these people has been compiled through the Eurostat Labour Force Survey for 12 EU Member States from 1992 onwards. From 1997, data is also available for the Czech Republic, Estonia, Hungary, Poland, Romania, Slovenia, Austria, Sweden and Finland; and from 2000 onwards statistics on numbers of individuals wanting to work

⁵¹ Council of the EU (2012), The social impact of the economic crisis and ongoing fiscal consolidation: third Report of the Social protection Committee (2011)

are available for all countries. Given other data challenges connected to availability of expenditure information particularly for some of the Member States (e.g., Bulgaria and Romania), the calculations of expenditures per person wanting to work necessarily omit certain countries where data on either category was missing.

Figure 2.7 Expenditure per person wanting to work, in euros of 2009



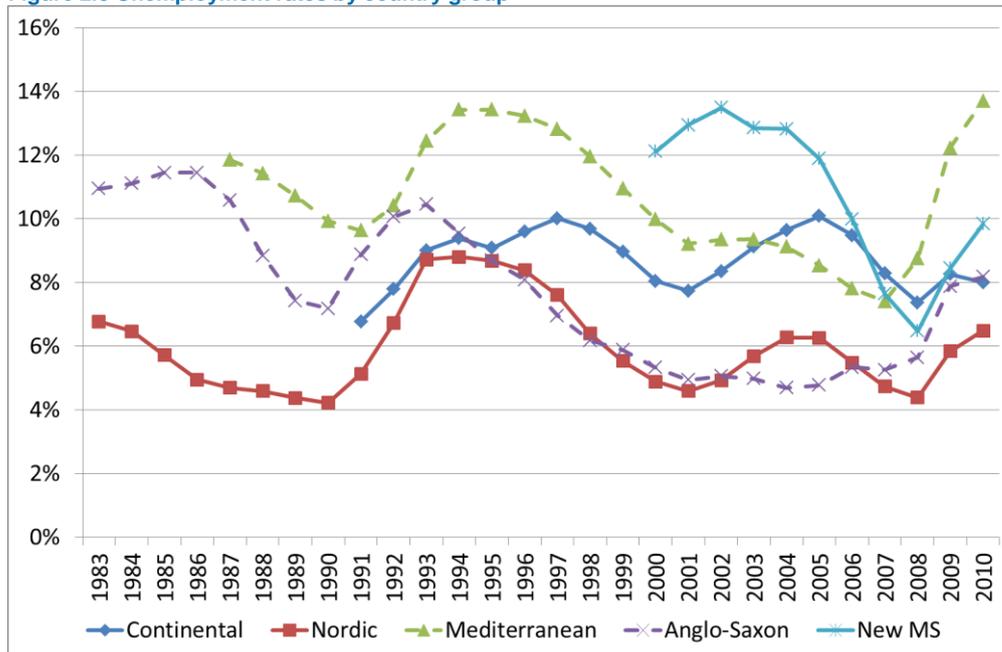
Data on 1992-1996: BE, DE, DK, IE, IT, ES, EL, FR, LU, NL, PT, UK. Data 1997-2003: BE, DE, DK, IE, IT, ES, GR, FR, LU, NL, PT, UK, CZ, SK, FI, SE. Data 2004-2006: All MS except CY and MT; Data 2006-2009: all countries.

Figure 2.7 reveals that spending per person wanting to work (in Euro values of 2009) does not react very strongly to recessions. With an average of 6,972 Euros between 1992 and 2009, costs peaked in 1993 and 2002, but stayed within the 10 per cent bandwidth of the period average even in those two years. The current recession has had an effect on expenditure, yet the data cannot confirm the assumption that in times of economic downturn the target group or the duration of participation is extended or reduced.

2.5 Trends in out-of-work income support

Being by far the category that assumes the highest amount of resources, measured both at the EU-GDP level and at the level of group GDP for each group, the category of out-of-work income and support primarily includes spending on unemployment benefits, intended to provide material support to those who have lost their job and are seeking new employment. Before discussing the expenditures, Figure 2.8 shows the unemployment rates by country group according to Eurostat Labour Force data. Figure 2.8 contains the average unemployment rates defined as the number of persons who are not working but actively looking and available for a job as a percentage of the active population (employed and unemployed). It shows three waves of increasing unemployment rates, one in 1991-1994, a second in 2001-2005 in the Nordic and Continental countries, and the latest in 2008-2010. It also shows that in 2008-2010 unemployment rates rose to lower levels than in preceding waves in all but the Mediterranean country group. Based on the unemployment rates, it is to be expected that expenditures on labour market policies would also rise sharply in the early 1990s, the early years of the first decade of the 21st century and 2008 and onward.

Figure 2.8 Unemployment rates by country group

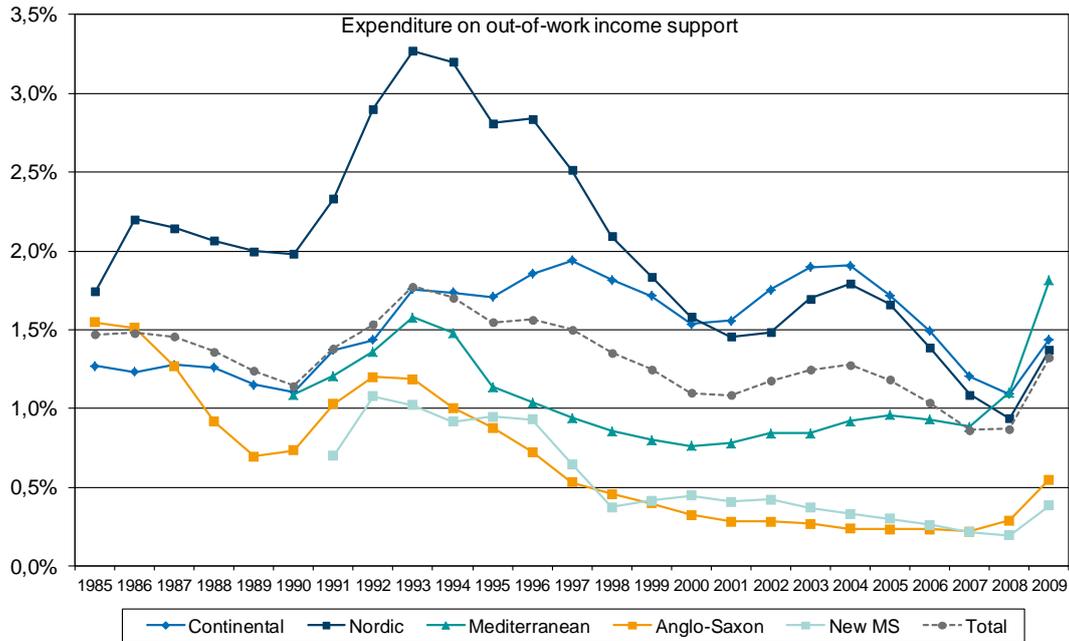


Source: Eurostat Labour Force Survey, calculations by Ecorys.

Notes: Continental excl. AT in 1991-1993, Nordic excl. FI in 1983-1987, Mediterranean excl. EL in 1983-1997.

Figure 2.9 shows developments in expenditures dedicated to out-of-work income and support. The broken line represents expenditures as a percentage of GDP at the EU level. Throughout the entire 1985-2008 period, spending on this category varied between 0.75 per cent and 1.8 per cent of EU-GDP. The first significant break in the data occurs, unsurprisingly, in the early 1990s. In 1993, roughly 30 per cent more resources (1.78% of EU-GDP) were spent on out-of-work income and support than in 1990 (1.14%). The effect of the recession on unemployment as measured per spending on unemployment benefits is visible up until 1998, which is the first year when expenditures returned to their pre-1990s level. The second recession as from 2001 is also visible for this category at the EU level, even though it is less pronounced, and there is also a certain time lag in the increase. In 2001 expenditure on unemployment benefits and other cash supports for job seekers amounted to 1.1 per cent of GDP. In 2002 however, expenditure rose to 1.3 per cent of EU-GDP. At the EU level, the latest recession is very visible given the 2009 figures, with an increase from 0.87 per cent to 1.37 per cent expenditures as a percentage of GDP.

Figure 2.9 Expenditure on out-of-work income support in percentage of respective group level GDP



At the group level, the generosity of benefits disbursed by the Nordic countries, at least until the beginning of the new decade, is evident. Until 1999, expenditure on out-of-work income and support never dropped below 2 per cent of GDP, and in particular during the first recession period expenditures almost doubled. Only after the economy picked up between 2004 and 2008, expenditures on out-of-work income support fell sufficiently to come in line with other EU-countries. The increase in the early 1990s is especially visible in Finland, where it rose from 0.6 per cent of GDP in 1990 to 4.3 per cent in 1993, as well as in Sweden (0.8% in 1990, 2.6% in 1993). The reason why expenditures did not drop between 1995 and 1996 in the group of Nordic countries is that the requirement to accept jobs was introduced in the Dutch social assistance scheme in 1995, and for the first time social assistance was classified as an employment policy. All Scandinavian countries in the group experienced an actual and substantial fall in expenditure during those years. So we can conclude that the trend we observe can be attributed at least partially to cyclical developments. The 2001 recession is also reflected in expenditures on unemployment benefits, although the increase is not as sharp as in the early 1990s. Between 2008 and 2009, expenditures in the Nordic group rose from 0.9 per cent to 1.3 per cent.

The Continental group's spending pattern for the category of out-of-work income and support is almost identical to the spending behaviour observed at the EU level. This is particularly evident for the latest break from 2008 to 2009 where the two curves match almost exactly. The increase in expenditures in the beginning of the 1990s is 50 per cent above the 1989/90 level, which should be attributed to the reunification process in Germany at that time, as laid off East German workers were given access to the unemployment benefit schemes in West Germany. What needs to be noted as well is that the 2001 recession is particularly evident in France and Germany, where increases in expenditure were real and significant in the years following the recession.

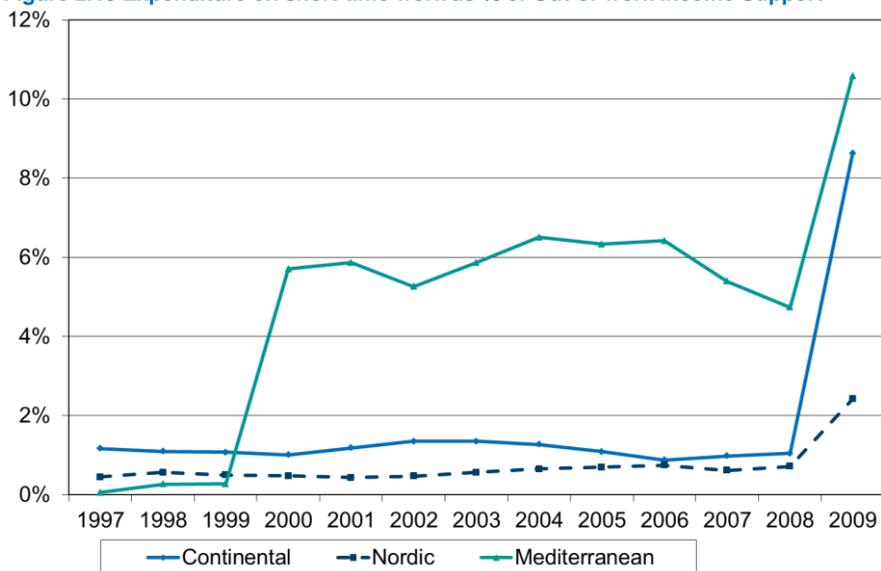
Expenditures on out-of-work income support in the Mediterranean countries (Group 3) also follow the EU-pattern, the main difference being a sharper increase from 0.9 per cent in 2007 to 1.8 per cent in 2009 of group GDP. Especially in Spain expenditures rose sharply from 1.4 per cent of GDP in 2007 to 2.9 per cent of GDP in 2009. The spending curve of the Anglo-Saxon Member States is very interesting, as expenditures do not increase in 2001 and after. This is explained by the fact that the Anglo-Saxon Member States were not hit by a recession in 2001 as was the case in many other Member States. Expenditures kept falling up to 2007, so it might be that a number of reforms

such as the tapering off of benefits and the introduction of the Job Seeker Allowance in 1996 helped reduce expenditures. Furthermore, the curve of the Anglo-Saxon group already shows an upward trend for the 2007-2008 period, which is plausible given the fact that those countries were among the first ones in Europe to experience the repercussions of the US crisis back then. The trend is much more visible for 2009. Finally, unemployment benefits have been kept rather stable in the new Member States (group 5) ever since early 1998; the slightly declining share of GDP devoted on unemployment benefits can be attributed more to the rapidly rising GDP levels than to lower expenditures. The higher expenditure levels before 1998 can be attributed to Poland, where expenditures dropped from 1.5 per cent of GDP in 1996 to 0.4 per cent of GDP in 1998.

2.6 Short-time work in 2009

Short-time work income support refers to partial unemployment benefits for employees whose working hours are reduced in their current job. Part-time work, however, refers to unemployed job seekers who were employed full-time in their previous job and start in a new part-time job. Seasonal unemployment insurance refers to unemployment in the winter in the construction sector (Austria, Germany) or the agricultural sector (Spain, Greece, Italy). In 2008 four countries had separate measures for unemployed job seekers for providing income while they participate in an active labour market programme. In 2009 expenditures on short-time work multiplied but still remained limited as can be seen in Figure 2.10.

Figure 2.10 Expenditure on short-time work as % of Out-of-work Income Support



Short-time work measures are usually encompassed within the category of out-of-work income and support. They refer to financial compensation to support workers who are engaged in some sort of short-time working arrangement. Amidst a notable peak in spending on such programmes during the last recession, it is evident that they still represent a very small share of spending on out-of-work income and support and thus of labour market policies in general.

Figure 2.10 provides an overview of the expenditures on these programmes as a percentage of overall out-of work income support. It must be noted that many of the Member States do not support these kinds of labour market policies. Those that do not are the United Kingdom and also the new Member States where data on spending on short-time work measures is only available for 2009 and then only for five of the countries in the group - Bulgaria, Hungary, Latvia, Malta and Slovenia - and amounts to 2.3 per cent of the spending on passive measures in the out-of-work

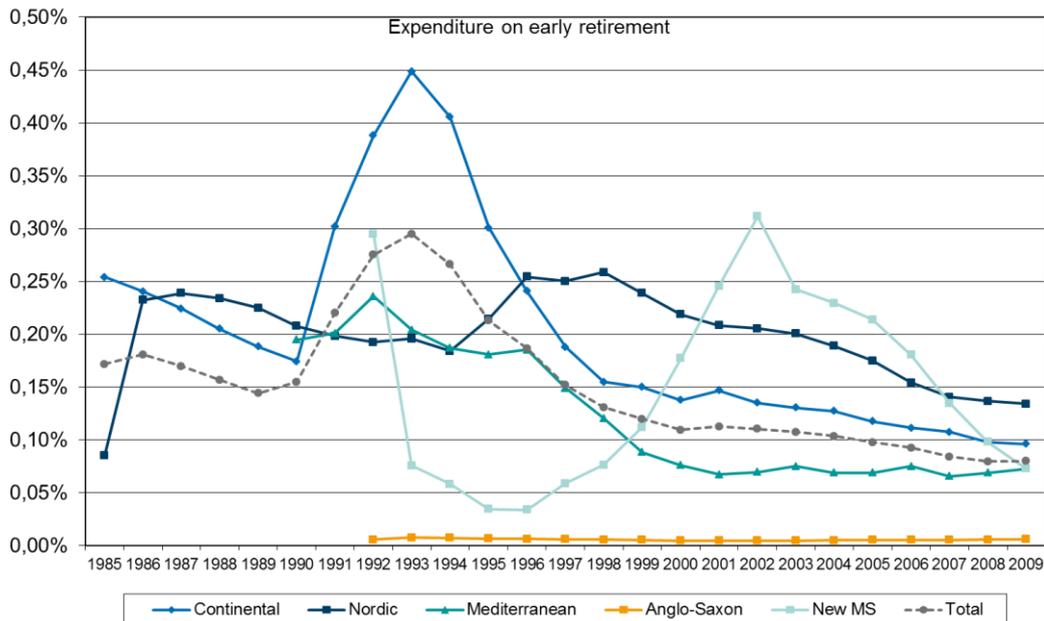
income and support category. The fact that the entire Anglo-Saxon group is omitted from the chart is due to the fact that while STD programmes exist in Ireland, no data is available on expenditures for this measure. Looking at the June 2011 EMCO report on participants in STW programmes in Ireland, it is evident that in 2009 Ireland had six times more participants in these schemes than the year before (18,000 compared to less than 2,000 in June 2008), and the level still remains high in 2010.

Both the Continental group (most notably Belgium and Germany) and the Nordic group (data for the latter includes the Netherlands and Sweden only) show that while short-time work measures were hardly utilized before 2009 and amount to about 1 per cent of total spending on out-of-work income and support, the latest recession has triggered an unprecedented rise in the utilization of such schemes in both country groups. A similar conclusion can be drawn for the Mediterranean countries, yet it is notable that short-time work measures already gained in importance there around the recession of the year 2000, and have not returned to their pre-recession level.

2.7 Trends in early retirement

The aim of measures included in the category of early retirement is to provide income support in the form of an early retirement benefit for those for whom it is either considered improbable that they will find a job due to their age, or whose early retirement would open up a position for an unemployed person from another target group. The early retirement benefit is usually paid until the person has reached the legal retirement age, and can be a full, partial, conditional, as well as sectoral benefit. Figure 2.11 illustrates the expenditure pattern for this category of labour market policies.

Figure 2.11 Expenditure on early retirement in percentage of respective group level GDP



At the EU level, we see that expenditures on early retirement benefits increased very sharply in the early 1990s, reaching a peak of around 0.3 per cent of EU-GDP in 1993, but have been decreasing ever since. As a matter of fact, three country groups - the Continental (Group 1), the Mediterranean (Group 3) and that of the new Member States (Group 5) all display a significant rise in expenditures around this first recession period. The rise is particularly visible for the Continental group, due to the developments around the German unification process, but also in the new Member States where

there is a very obvious jump in expenditures. 1992 is the first year for which Poland recorded spending in this category and with 0.37 per cent of national GDP it is the most significant spender on such policies in the group.

The new Member States seem to have been making increasing use of early retirement benefits. It must be noted that early retirement was very popular before 1989, and that in general the former communist countries have a tradition of younger retirement ages than the old Member States. However data on expenditures on early retirement in the new Member States before 1992 are lacking. The declining share of GDP devoted on early retirement since 2002 is partly attributed to a rapidly rising GDP, but starting from 2007 also to a real decline of expenditures.

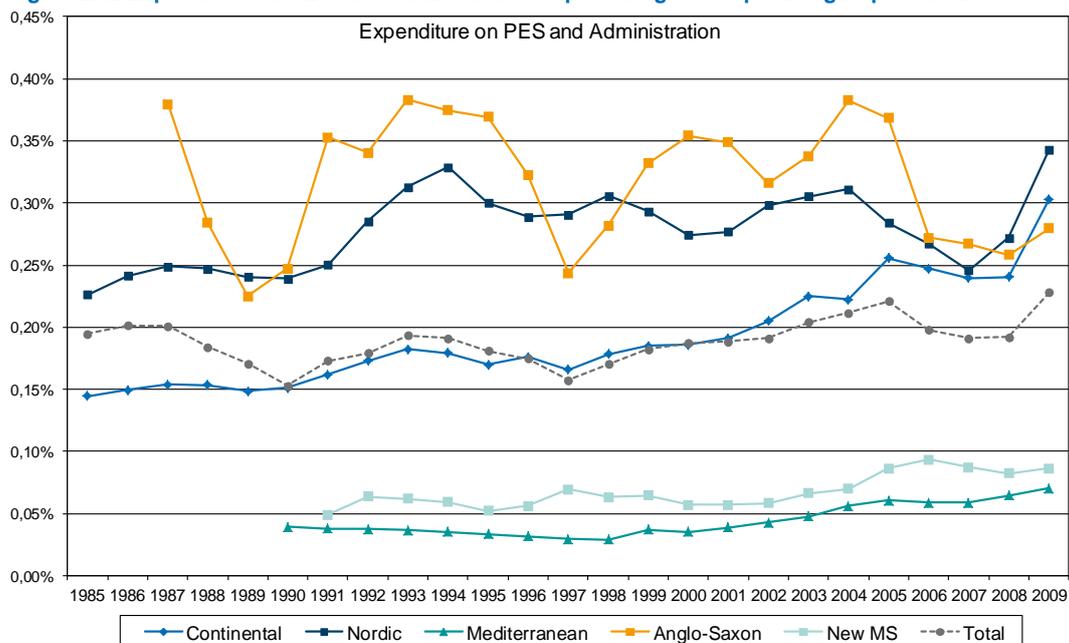
A final expenditure break to be noted is the one that occurred in the Nordic countries in the second half of the 1990s. Of the countries that constitute that group, it is Denmark that experienced a sharp increase in expenditures during that time Denmark pursued a policy on progressive early retirement, which included two schemes designed to keep older people in the labour market for longer. Therefore, expenditure on those schemes in the form of subsidies to employers are probably recorded in that category. At the same time, a measure aimed at supporting early retirement of unemployed people first appears in the 1998 data on early retirement in Denmark.

It is interesting to note that early retirement measures do not seem to be responding to the latest recession.

2.8 Trends in labour market services

This section analyses in more detail the spending of the different groups on labour market services as provided by the public employment services, including the spending on the administration of benefits. Figure 2.12 shows the expenditure patterns for each of the five groups, measured in percentage of their respective aggregate GDP at the group level.

Figure 2.12 Expenditure on PES and Administration in percentage of respective group level GDP



At the overall EU level expenditures on labour market services are quite stable at about 0.2 per cent of EU-GDP. If we examine the spending patterns for the different country groups, the developments in the Anglo-Saxon group stand out the most. In the early 1990s, Ireland underwent a major re-organization of its employment services agency, FÁS, to administrate labour market policies. But in magnitude, the UK developments dominate. Until 1993 the expenditures on UK labour market services were in line with the strong developments in unemployment benefits. In fact, benefit administration is the largest spending category of active labour market policies in the UK. The turnaround in expenditures in 1997 can be attributed to the Job Centre Plus, which experienced budget cuts since 1995 but as from 1997 became the gateway to various New Deal programmes. In 2003 the UK introduced the “Entry to employment” programme for young jobseekers and in 2004 Job Centre Plus programmes. Both programmes increased expenditures, followed by sharp expense cuts in regular placement and advisory functions of Jobcentre Plus in 2005.

Expenditures on labour market services rose in the early 1990s in the Continental group and again in the early 2000s. The increase in the 1990s is mainly motivated by the Reunification process in Germany, as East Germans were given access to the labour market schemes of West Germany, causing costs for administration and service provisions to skyrocket. France also experienced a significant rise in expenditures on this category, which may be related to the introduction of the RMI, a measure for activation contracts between public employment services and people in minimum income schemes. In the 1990s expenditures also rose in Belgium as individual action plans gained importance. Between 1998-2000 the increase is initially due to increased job search assistance in Germany and France, in both countries primarily to combat youth unemployment. But between 2000-2005 the increase is mostly explained by an increase in administrative expenditures in both countries.

The Nordic countries already started devoting more resources to this category starting from the 1990s onwards, in particular in the Netherlands, which underwent a major reform decentralizing PES in 1991. Finland’s spending on labour market services also grew and that rise can be attributed to the massive unemployment wave during the recession, as demand from job seekers increased. In addition, the Finnish PES has a specific role in administering unemployment benefits, as they need to prepare binding statements for the unemployment insurance bodies.

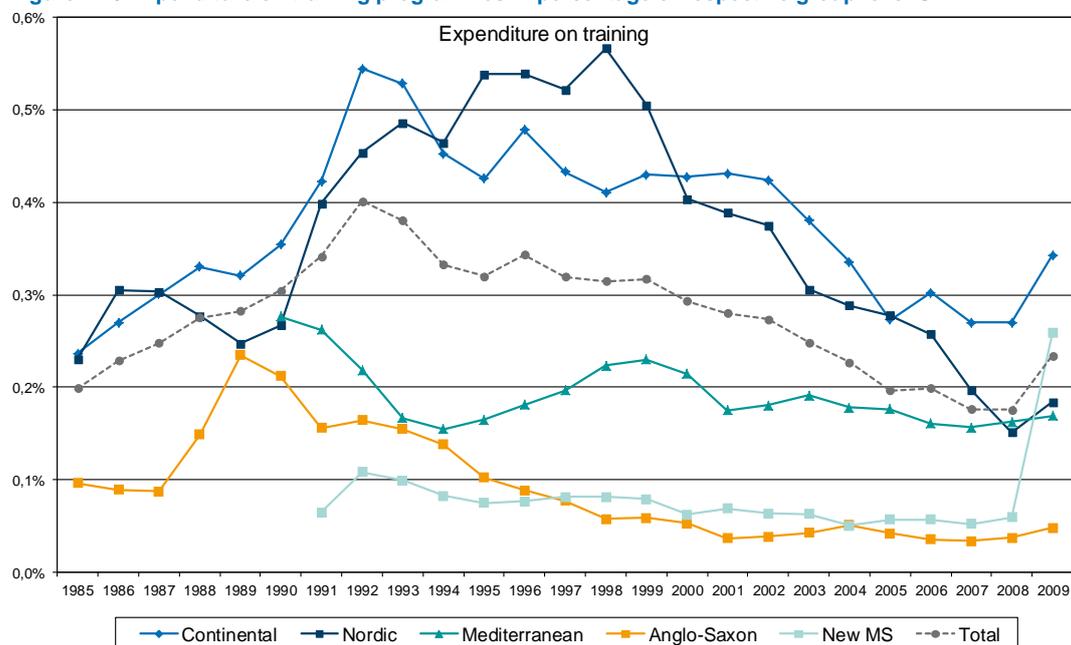
Expenditures on labour market services are at low levels in the Mediterranean countries and the new Member States. Lack of data partly explains low registered levels in the Mediterranean countries. Expenditures on PES staff in Greece are missing for the entire period and expenditures on PES staff in Italy are missing up to 2003. Some literature indicates for Italy that the PES had been underdeveloped when it was the responsibility of the regions up to 1999. For the new Member States, the increase since the early years of the 21st century may be largely due to ESF funded projects which need to be administrated.

The Nordic, Continental and Anglo-Saxon groups were all faced with increased demands on their labour market services in the last few years, while the new Member states and the Mediterranean country groups do not record any significant increases in expenditure on this category. Among the Mediterranean countries, expenditures rose by almost 50 per cent between 2007 and 2009 in Spain in response to an unemployment increasing from 8 per cent to 18 per cent. But in Italy the increase in unemployment rate was comparatively small, from 6 per cent in 2007 to 8 per cent in 2009 and the winding down of ESF programs to improve public employment services and counselling in particular caused expenditures to actually fall down by almost 25 per cent between 2008 and 2009.

2.9 Trends in training

Training programmes, which include both training for the employed and for the unemployed, tend to be one of the most important activation measures. Figure 2.13 shows that overall EU expenditure on this category ranges between 0.2 and 0.4 per cent of GDP.

Figure 2.13 Expenditure on training programmes in percentage of respective group level GDP



Before the 2008 recession, the expenditure pattern for the entire EU displays only one significant break, which occurs at the beginning of the 1990s. The chart clearly shows that the increase of expenditures on training is driven by the Continental and Nordic countries. Whilst in the Continental countries expenditures dropped steadily as from 1992, expenditures peaked in 1997 in the Nordic countries, only to fall sharply afterwards. All Scandinavian countries have increased spending on training programmes in the early 1990s, yet data from this time does not provide sufficient information on whether the recipients of such services were mainly employed or unemployed. The fact that this break coincides with the drastic unemployment shock in this group suggests the latter version.

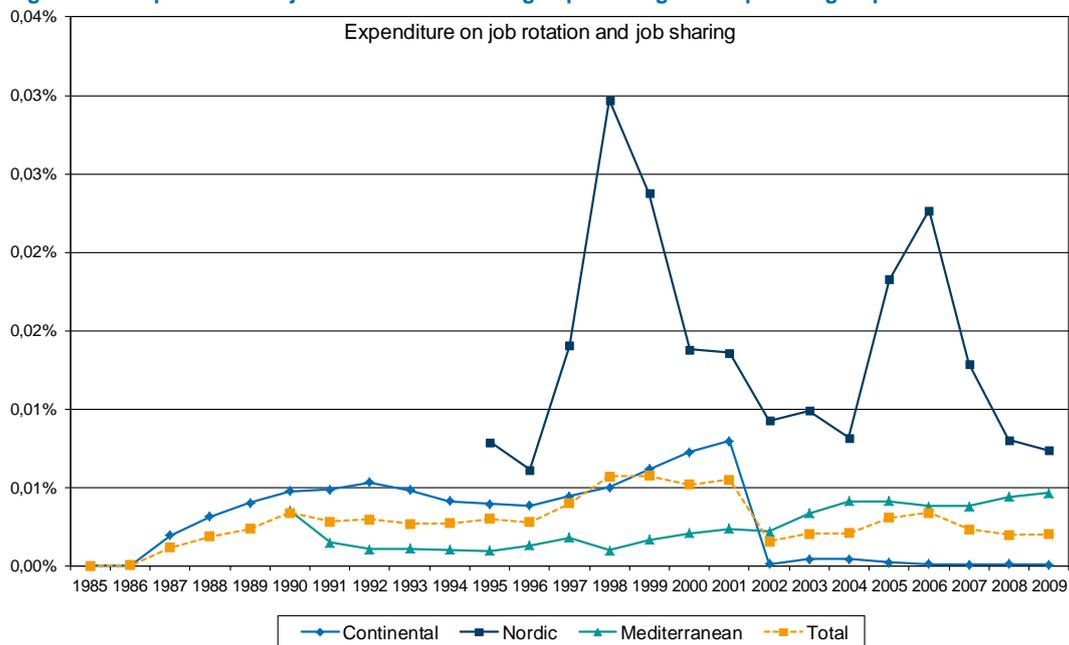
The Mediterranean and Anglo-Saxon groups of countries, however, experienced a drop in expenditures on training in the early 1990s. Of the Mediterranean countries, Italy is the big spender on training programmes, and expenditures on training & working contracts halved in Italy between 1991 and 1994. The second increase by 1997 can be explained by a reform in that same year. In the light of pressures from both high unemployment rates and a very high share of temporary employment contracts, the Mediterranean countries introduced the so-called Agreement for Permanent Employment, which also included a very strong emphasis on the role of continuous training to reduce the typical rigidities of the Spanish labour market. The expenditure increased drastically between 2008 and 2009 for this group, and the Continental countries also seem to have allocated more spending to this category in response to the latest recession. The drop in training expenditures in the Anglo-Saxon countries is driven by the phasing out of the New Job Training Schemes introduced in 1987, which were replaced with the Modern Apprenticeships Scheme in 1995 and the New Deal for Young People (NDYP) in 1998. In Ireland expenditures on training also dropped as a percentage of GDP between 1990 and 2000 but have increased again since 2000, mainly through increased expenditures on the Back to Education Allowance (BTEA).

For the new Member States in 2009 expenditures on training decreased slowly between 1992 and 2004, the year of accession to the EU for 10 countries. From 2004 expenditures increased, partly through co-funding by ESF which for training amounted to roughly one third in for example Poland. Expenditures rose sharply in 2009 in the new Member States, although the increase is less extreme after revision of the 2009 figure for Poland in March 2012.⁵²

2.10 Trends in job rotation

Measures that promote job rotation and job sharing are aimed at providing resources for temporary or part-time vacation of job positions so as to free up some capacity to hire unemployed people. The idea is that regular employees would be allowed time to cope with work-related stress and fatigue. However, Figure 2.14 shows that the measure has been introduced in the packet of ALMPs for only a few country groups. Even for those country groups, job rotation has the smallest share within all the activation policies.

Figure 2.14 Expenditure on job rotation and sharing in percentage of respective group level GDP



As a matter of fact, we can see that only three country groups - the Continental, the Nordic and the Mediterranean - have a few programmes in place that focus on job rotation and sharing practices, and only the Continental countries have provided such programmes throughout the entire period under study. Looking closer into the countries that comprise the Continental group, it becomes clear that only Belgium had job rotation and job sharing programmes as from 1985. They were discontinued during the first years of the 21st century, which explains the large drop in expenditures at that time. Germany has started devoting some resources to job rotation policies, but the share is negligible. Spain spends around 0.01 per cent of its GDP on job rotation programmes.

The Nordic countries, and in particular Finland, also have some expenditures on job rotation programmes. Job rotation peaked in Sweden in 1997 and 1998 and again in 2005 and 2006, but even so this activation measure has never occupied a significant place among the spectrum of such policies.

⁵² The analysis in this report is based on the figures before this revision.

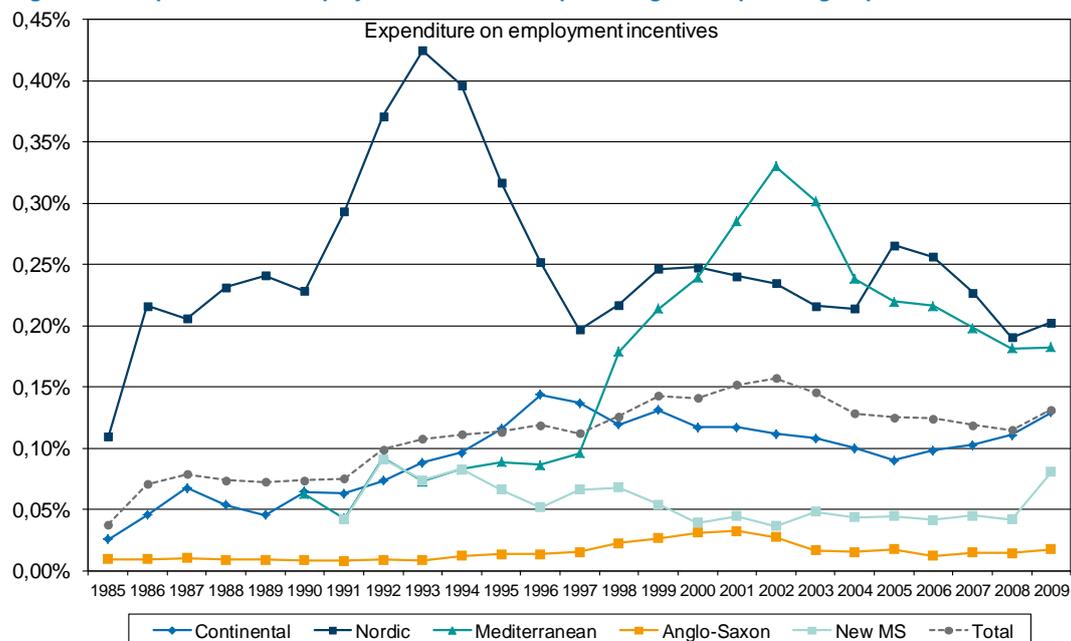
2.11 Trends in employment incentives

The category of employment incentives comprises measures and programmes that either facilitate the hiring of unemployed people (recruitment incentives, used in particular to improve employability by providing some work experience) or assist in continuing the employment of persons and groups that are at risk of losing their jobs due to restructuring or economic pressures (employment maintenance incentives). It must be noted that for such programmes, it is the employer who bears the majority of the labour costs associated with employment. Employment incentive programmes receive the third largest share of overall spending on ALMPs at the EU level, after training and labour market services.

The first conclusion that can be drawn from Figure 2.15 is that expenditures on employment incentives at times display a certain countercyclical profile but not at other times. It seems that policymakers make different decisions on employment incentives in times of crisis. The overall spending on this category is 0.11 per cent of GDP averaged at the EU-level for 1985-2009.

At the group level, we see that both the Anglo-Saxon countries and the New Member states seem to place a rather limited emphasis on employment incentives, although an upward trend can be observed in the New Member states over the last few years. Of all the groups, the Nordic group devotes the highest share of its GDP to employment incentives programmes, and especially around the time of the crisis in the 1990s it almost doubled the resources spent on these measures. Both Denmark and Sweden spent on average about 0.5 per cent of their GDP on this category. One difference between these two countries is that, looking into data on the measures level from 1997 onwards, it seems that while Denmark focuses exclusively on recruitment incentives for the unemployed and the disabled by providing subsidized work experience, Sweden supports both these measures as well as training and skills enhancement for employed people at risk.

Figure 2.15 Expenditure on employment incentives in percentage of respective group level GDP



The driver behind the overall expansion of employment incentives as an ALMP category at the beginning of the 21st century is clearly the group of Mediterranean countries. Between 1998 and 2001 spending more than doubled at the group level. In 1997 Spain introduced the open-ended

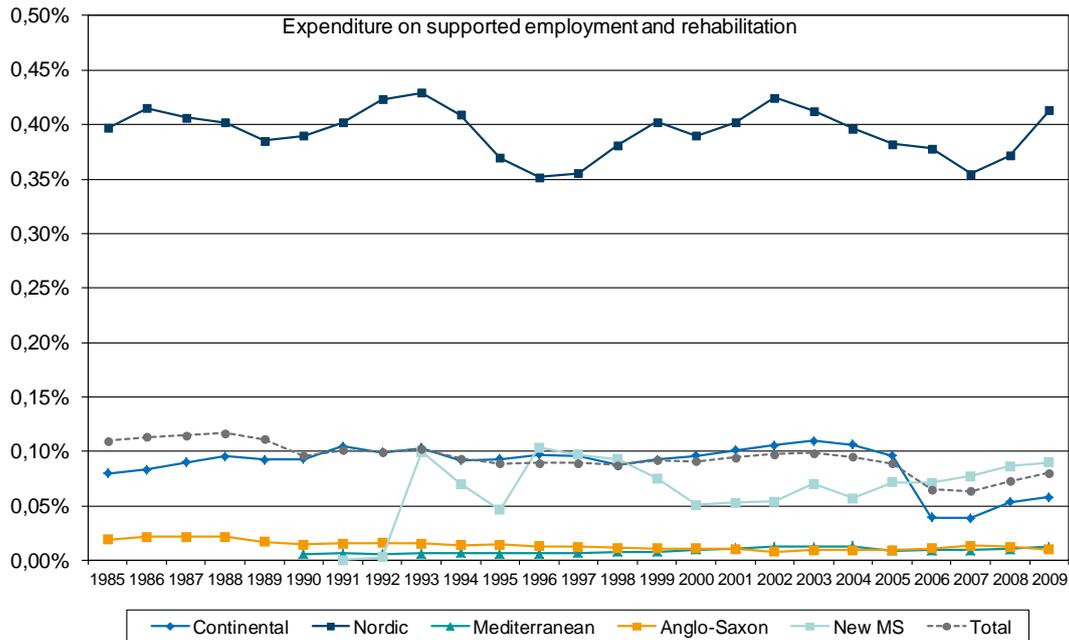
employment contracts which combined training with employment incentives to combat youth unemployment and their dependence on temporary jobs. Further increases in 2000 and 2001 are due to the “triennial relief” programme in support of employment creation in the Mezzogiorno region in Italy, and due to a tax relief in 2001 and 2002 for job creation in Italy. Greece has been spending around 0.07 per cent of its GDP on employment incentives measures over the entire period, except for the New Jobs Programme for the unemployed (OAED) in 2001, amounting to 0.14 per cent of GDP in that year. The Mediterranean countries did not spend more on employment incentives as a measure to respond to the latest economic recession. It should be noted, however, that employers in Spain, for example, during the last recession, were temporarily exempted from social security contributions, which does not show up in the labour market expenditures.

It is also interesting to examine the developments in the Continental group, which displays a somewhat similar spending behaviour as the one observed at the EU-level. The spending curve of the Continental group clearly peaks in 1995 and 1996, when France and Belgium introduced bonuses to combat youth unemployment in particular, whilst Germany and Luxembourg increased bonuses for the employment of severely disabled and long-term older unemployed workers. However, all countries reduced these expenditures soon after, when unemployment levels started to decline. Recruitment bonuses were introduced again in 2001 except in France that continued to wind down what it refers to as employment-initiative contracts. The increased expenditures in the latter years of the first decade of the 21st century can be largely attributed to Belgium, which in 2004 introduced a voucher to employ unqualified workers for purposes of reducing informal work in the housekeeping sector. Luxembourg increased expenditures on a measure to compensate the wage difference if workers accept a job with lower wages than their previous job. Nevertheless, Continental countries are less prone to turn to recruitment and maintenance measures during recessions than most other countries.

2.12 Trends in supported employment and rehabilitation

The category of supported employment and rehabilitation covers measures aimed at integrating into the labour market such persons who have reduced working capacity, i.e., primarily disabled people as identified according to the national definitions. While supported employment measures tackle the employment of this target group directly through provision of subsidies to ensure a workplace, rehabilitation measures seek to assist impaired people to improve their employability by providing vocational rehabilitation. Figure 2.16 shows the spending pattern on this category for the overall EU level, as well as per country group in percentage of the respective GDPs.

Figure 2.16 Expenditure on supported employment and rehabilitation in percentage of respective group level GDP



At 0.1 per cent of GDP averaged at the EU level between 1985 and 2009, this category is the third highest ALMP category in terms of share of spending on GDP, on par with employment incentives and direct job creation. Looking at the spending pattern on supported employment and rehabilitation, it is evident that spending increased slightly in the early 1990s, but since then and especially since 2000 has followed a downward trend, which reverses slightly in the years after 2007. The Anglo-Saxon and the Mediterranean group spend hardly any resources on such measures.

The EU trend seems to be driven by the spending of the Continental group, since spending in the other groups of countries is quite stable throughout the whole period. If we consider the priorities as expressed in spending per measure of this category from 1997 onwards, it is evident that Germany focuses on rehabilitation policies by providing vocational education to disabled people, while Austria also engages in supported employment through direct subsidies to enterprises. During the rest of the 1990s, the Continental group's spending on supported employment and rehabilitation still remained higher than before the early 1990s, but since 1999 shows a continuous and sharp drop. This trend can be attributed to developments in Germany, in particular to the Hartz reform. Since one of the objectives of the Hartz reform was to increase prioritization of disabled and elderly workers, this observation seems counterintuitive.

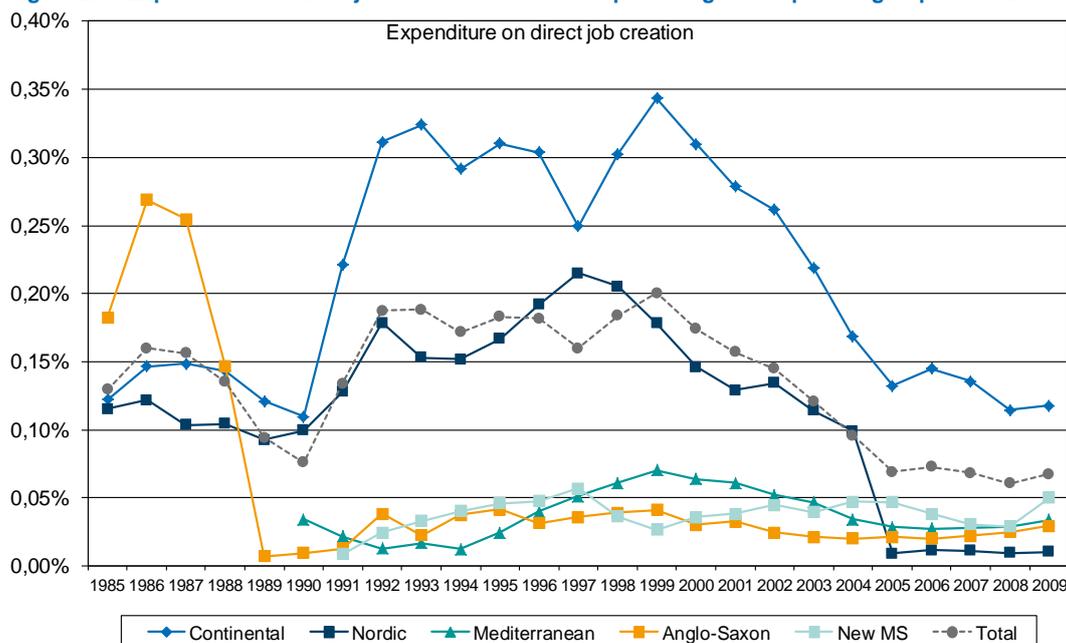
The Nordic group clearly stands out in terms of expenditures on supported employment and rehabilitation, and their spending behaviour seems stable throughout the entire period. If anything, we see that expenditures tend to drop as the economy picks up, in the late 1980s, the mid-1990s and after 2003. The biggest spenders among the Nordic group are Denmark and the Netherlands, with each devoting on average about 0.5 per cent of their GDP on supported employment and rehabilitation measures. During the last few years, Denmark has shifted to spending similar proportions on both subsidized work places and rehabilitation measures, whereas the Netherlands clearly emphasizes rehabilitation programmes. The period 2007-2009 is marked by a sharp increase in spending on this category.

Finally, the New Member States spend between 0.05 and 0.1 per cent of their GDP on supported employment and rehabilitation measures. The expenditures dropped in the late 1990s, and picked up again after their accession in 2004.

2.13 Trends in direct job creation

Direct job creation refers to policies that lead to opening up new jobs, typically those that have a certain communal and social value. The target group of this category are those unemployed who experience particular difficulties in finding a job, i.e., the long-term and the low-skilled unemployed.

Figure 2.17 Expenditure on direct job creation measures in percentage of respective group level GDP



At the overall level, we see an increase in expenditures in the years after the recession of the early 1990s. Expenditures remained stable in the mid and late 1990s, but direct job creation has rapidly lost favour since 2000. Only a slight reaction is evident for the 2008-2009 period, with the exception of a sharp increase in 2009 in the new Member States and in particular in Hungary.

As Figure 2.17 shows, all country groups display very different behaviour in terms of expenditure on direct job creation schemes. For the Nordic countries, expenditures doubled around the 1990s' but have been continuously reduced since a further peak in 1997, starting with the Pool Jobs in Denmark (abandoned between 1999 and 2001), Resource Work and the OTA scheme comprising temporary jobs for older unemployed workers in Sweden (abandoned in 2000 and 2001) and the Inflow/Outflow Jobs and the Work Experience Jobs in the Netherlands (both abandoned in 2005).

Direct job creation schemes have also enjoyed popularity in the Continental states in the 1990s, indicating that such measures have been deemed adequate for addressing labour market deficiencies both in times of recession and in times of economic growth. However, expenditures have dropped to only a third of its 1999 level. This effect can be traced to Germany and France. Both countries introduced drastic cuts in direct job creation measures, between 1999 and 2005 in Germany and between 2002 and 2005 in France. The Hartz reform in Germany significantly cut overall costs through the creation of the One-Euro-jobs, which in terms of volume is by far the largest programme included in this category. However, as participants received only a small compensation for their work, it actually reduced overall costs significantly.

For the Anglo-Saxon countries we see that between 1987 and 1989 expenditure on direct job creation measures almost vanished, as the STEP, CEP and CP jobs were abandoned. Both the New Member States and the Mediterranean countries display a low expenditure on direct job creation programmes. The Mediterranean trend is mainly driven by Spain, where spending on direct job creation in various programmes increased from 0.05 per cent of GDP in 1996 to 0.11 per cent in 2000 and then fell back to 0.07 per cent in 2005.

2.14 Trends in start-up incentives

Programmes included in this category aim to assist unemployed people and other target groups to develop entrepreneurial skills and to start their own businesses. Thus, the category includes both training and direct support measures. Together with job rotation and job sharing, this category occupies the lowest ranks among the different ALMPs in terms of overall spending in the EU. Nonetheless, as Figure 2.18 shows, there has been a significant increase in the importance of this category since the end of the 1990s, although the trend has been waning since 2008.

This trend can be attributed to increases in expenditures of the Continental group in particular, as well as to the emergence of spending on start-up incentives in the countries of the Mediterranean group. The increase in the Continental countries can clearly be traced back to Germany, the only country in the group with spending on this category of measures and which also significantly increased the proportion of spending between 1997 and 2004.

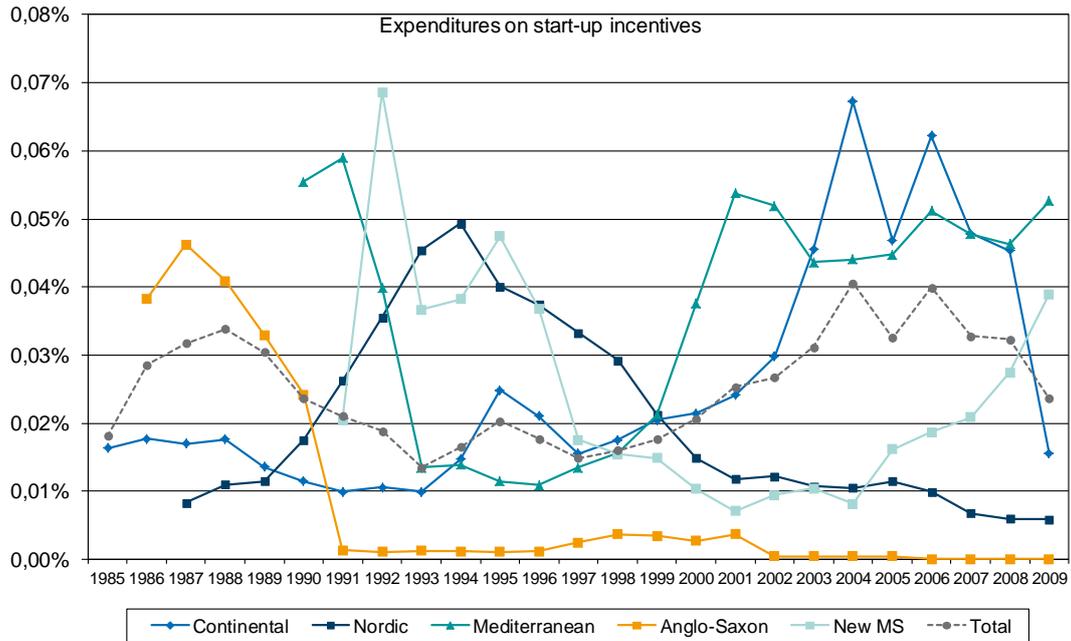
All Mediterranean countries have adopted measures targeted at promoting entrepreneurship, although Spain, and since 2000 Italy as well, spend a larger portion of their GDP on start-up incentives than Portugal and Greece. The drop in spending between 1991 and 1993 is evident in the reduced use of the capitalization of unemployment benefits in Spain whilst the increase in 2000 and 2001 is largely due to the introduction of loans for one-person businesses in Italy.

For the Nordic countries, the picture should be considered with caution as no expenditure data is available for the Netherlands, although the Netherlands does have several measures to promote entrepreneurship, both for the unemployed and for those dependent on social assistance.

Finally, New Member States are also starting to introduce start-up incentive programmes. This development has risen sharply over the last few years. The 1992 peak is due to income support to unemployed people starting a business. Half of this income support in 1992 was counted as an unemployment benefit.

A final interesting observation in this category of ALMPs is related to cyclical effects. Looking at the mid- and late 1990s, it is evident that start-up incentives attract more attention in times of economic growth, when the chances of a successful business should be better. With the exception of the Nordic and Anglo-Saxon countries, this observation seems to hold true for the period after the 2001 recession as well.

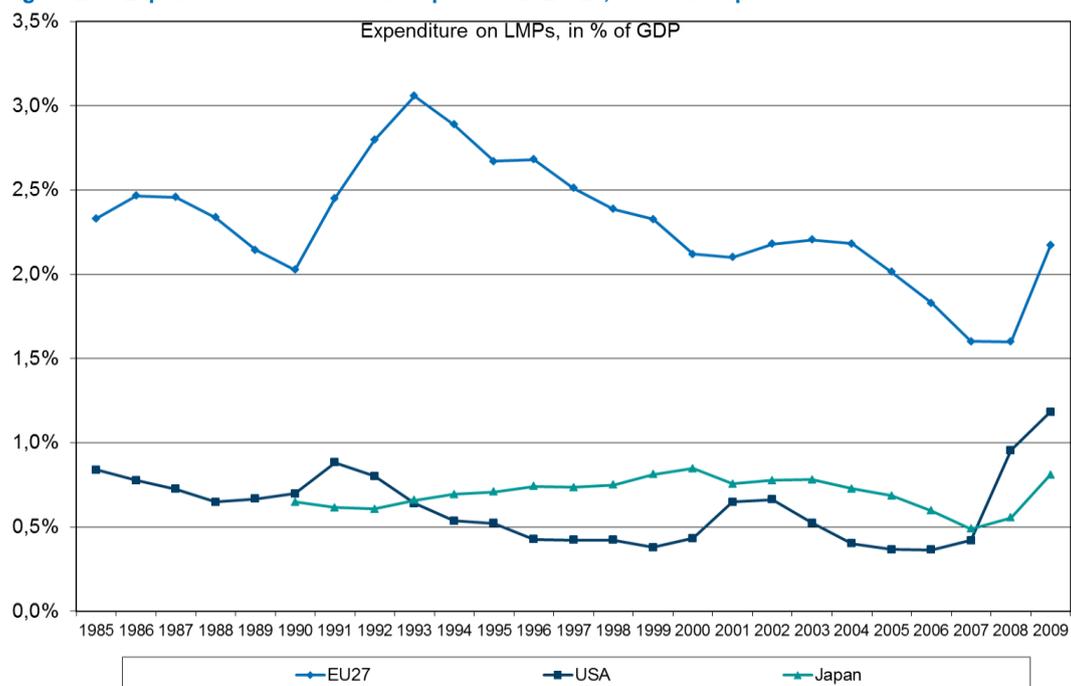
Figure 2.18 Expenditure on start-up incentives in percentage of respective group level GDP



2.15 International Comparison

Figure 2.19 reflects the EU expenditure trend on labour market policies compared to spending patterns in the USA and Japan. Expenditure in the European countries is much larger as measured in a share of GDP. The recession of the early 1990s has been more pronounced in Europe, with some repercussions evident in the USA, but hardly any impact on spending in Japan. While Japan shows an early and rather mild response in expenditure on labour market policies in the second recession, the US reacts stronger with expenditure rising from 0.43 per cent to 0.66 per cent of GDP between 2000 and 2002. As regards the latest economic downturn, it is not only clear that it has had a substantial impact on the labour markets in all three economies, but also that expenditures in the US and Japan rose sooner - already between 2007 and 2009 - than in the EU.

Figure 2.19 Expenditure on labour market policies in EU-27, USA and Japan



Source: OECD (1985-1997) and Eurostat (1998-2009) LMP database, calculations by Ecorys. The coverage of EU countries is increasing over time and is the same as indicated in the footnote to Figure 2.2.

The rise in expenditures in the US in 2008 is fully explained by the increase in unemployment benefits as the unemployment rate rose from 4.6 per cent in 2007 to 9.3 per cent in 2009. Expenditures on unemployment benefits were further affected by the extension of the maximum unemployment benefit from one to two years, causing expenditures to increase from 0.3 per cent of GDP in 2007 to 0.8 per cent in 2008 and 1.0 per cent in 2009 while expenditures on active measures remained stable.

Unemployment rose more modestly in Japan, from 3.9 per cent in 2007 to 5.1 per cent in 2009. The initial reaction in Japan was to double expenditure on active measures in 2008 by spending 0.1 per cent of GDP on directly created jobs whilst spending on unemployment benefits remained stable. However, in 2009 direct job creation was not increased and unemployment benefits rose from 0.3 per cent to 0.5 per cent of GDP. Consequently, the ratio of passive to active spending was back to pre-crisis values.

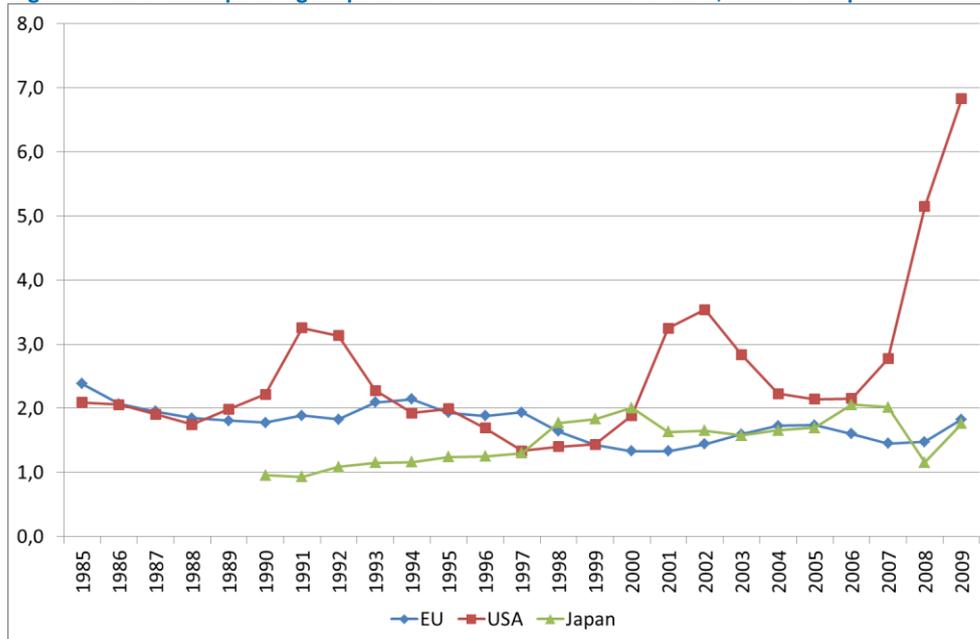
The situation and the reaction in the EU-27 were both in between those of the US and Japan. Unemployment rose from 7.2 per cent in 2007 to 9.0 per cent in 2009 and spending on passive measures rose more sharply than on active measures, more so than in Japan but less so than in the US.

The different spending patterns of the EU, the US and Japan in 2008 and 2009 can be largely attributed to developments in the unemployment rate. The differences in the increase of expenditures in 2008 and 2009 are likely explained by differences in employment protection, which according to a recent OECD study on short-time work measures is strongest in Japan (and Germany), less in most other EU countries and low in the US.⁵³ Figure 2.20 shows that spending

⁵³ Hijzen, A. and D. Venn (2011), The role of short-time work schemes during the 2008/09 recession, OECD Social, Employment and Migration Working Papers, No.15, OECD Publishing.

on passive measures had always been more countercyclical in the US, but also how strongly the US was affected by the crisis in 2008 and later.

Figure 2.20 Ratio of spending on passive to active measures in EU-27, USA and Japan



2.16 Overview tables by country

This section discusses spending on labour market policies in individual countries. Section 2.3 has shown that spending is closely related to unemployment rates. We discuss the developments in 1998-2007 and 2007-2009 to indicate how countries fared before and after the crisis starting in 2008. In 1998 and 2000 the highest unemployment rates were found in Bulgaria, Slovakia and around the Baltic Sea: Lithuania, Latvia, Estonia, Poland and Finland. Unemployment rates were also high in the continental countries except Austria and Luxembourg, and the Mediterranean countries except Portugal.

Between 1998 and 2007 unemployment rates were fairly stable in all Continental countries except Luxembourg, and fell sharply in most other countries, with Portugal, Poland, Hungary, Romania, the UK and Malta as most notable exceptions. The 2008/2009 crisis hit a number of countries spread all over the EU in particular: unemployment rates increased sharply in Denmark, Spain, Ireland, and the three Baltic countries. In 2010 the crisis deepened in particular in Bulgaria.

Table 2.2 Unemployment rate by country, 1998-2010

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Continental													
AT	4.5	3.9	3.6	3.6	4.2	4.3	4.9	5.2	4.8	4.4	3.8	4.8	4.4
BE	9.3	8.5	6.9	6.6	7.5	8.2	8.4	8.5	8.3	7.5	7.0	7.9	8.3
DE	9.4	8.6	8.0	7.9	8.7	9.8	10.5	11.3	10.3	8.7	7.5	7.8	7.1
FR	11.0	10.4	9.0	8.3	8.6	9.0	9.3	9.3	9.2	8.4	7.8	9.5	9.8
LU	2.7	2.4	2.2	1.9	2.6	3.8	5.0	4.6	4.6	4.2	4.9	5.1	4.6
Nordic													
DK	4.9	5.2	4.3	4.5	4.6	5.4	5.5	4.8	3.9	3.8	3.3	6.0	7.4
FI	11.4	10.2	9.8	9.1	9.1	9.0	8.8	8.4	7.7	6.9	6.4	8.2	8.4
NL	4.3	3.5	3.1	2.5	3.1	4.2	5.1	5.3	4.4	3.6	3.1	3.7	4.5
SE	8.2	6.7	5.6	5.8	6.0	6.6	7.4	7.7	7.1	6.1	6.2	8.3	8.4
Mediterranean													
EL	11.1	12.0	11.2	10.7	10.3	9.7	10.5	9.9	8.9	8.3	7.7	9.5	12.6
ES	15.0	12.5	11.1	10.3	11.1	11.1	10.6	9.2	8.5	8.3	11.3	18.0	20.1
IT	11.3	10.9	10.1	9.1	8.6	8.4	8.0	7.7	6.8	6.1	6.7	7.8	8.4
PT	5.6	5.0	4.5	4.6	5.7	7.1	7.5	8.6	8.6	8.9	8.5	10.6	12.0
Anglo-Saxon													
IE	7.5	5.6	4.2	3.9	4.5	4.6	4.5	4.4	4.5	4.6	6.3	11.9	13.7
UK	6.1	5.9	5.4	5.0	5.1	5.0	4.7	4.8	5.4	5.3	5.6	7.6	7.8
New Member States													
BG	:	:	16.4	19.5	18.2	13.7	12.1	10.1	9.0	6.9	5.6	6.8	10.2
CY	:	:	4.8	3.9	3.5	4.1	4.6	5.3	4.6	3.9	3.7	5.3	6.2
CZ	6.4	8.6	8.7	8.0	7.3	7.8	8.3	7.9	7.2	5.3	4.4	6.7	7.3
EE	:	:	13.6	12.6	10.3	10.0	9.7	7.9	5.9	4.7	5.5	13.8	16.9
HU	8.4	6.9	6.4	5.7	5.8	5.9	6.1	7.2	7.5	7.4	7.8	10.0	11.2
LT	13.2	13.7	16.4	16.5	13.5	12.5	11.4	8.3	5.6	4.3	5.8	13.7	17.8
LV	14.3	14.0	13.7	12.9	12.2	10.5	10.4	8.9	6.8	6.0	7.5	17.1	18.7
MT	:	:	6.7	7.6	7.4	7.7	7.2	7.3	6.9	6.5	6.0	6.9	6.9
PL	10.2	13.4	16.1	18.3	20.0	19.7	19.0	17.8	13.9	9.6	7.1	8.2	9.6
RO	5.4	6.2	6.8	6.6	7.5	6.8	8.0	7.2	7.3	6.4	5.8	6.9	7.3
SI	7.4	7.3	6.7	6.2	6.3	6.7	6.3	6.5	6.0	4.9	4.4	5.9	7.3
SK	12.6	16.4	18.8	19.3	18.7	17.6	18.2	16.3	13.4	11.1	9.5	12.0	14.4

Source: Eurostat Labour Force Survey.

In general, countries in the country groups as used in this report have similar expenditure patterns. Table 2.3 shows expenditures as a percentage of GDP per country for the 1998-2009 period. The data is based on Eurostat LMP data. Data pertaining to the earlier years in this period is missing for one or two measures and therefore Eurostat does not publish values for those measures, in which case values were taken from the OECD database for those one or two measures. Whenever only OECD data is used, it is annotated as such in the table.

**Table 2.3 Total expenditures on labour market policies as a percentage of GDP, per country, 1998-2009,
In 2009 euro values**

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Continental												
AT	1.9	1.9	1.7	1.8	1.8	2.0	2.0	2.1	2.1	1.9	1.8	2.3
BE	3.7 ⁱ	3.5 ⁱ	3.2 ⁱ	3.3 ⁱ	3.3 ⁱ	3.5 ⁱ	3.5	3.5	3.3	3.2	3.3	3.7
DE	3.4	3.4	3.1	3.1	3.4	3.5	3.4	2.9 ^e	2.6 ^e	2.0 ^e	1.9 ^e	2.5 ^e
FR	2.7	2.7	2.6	2.6	2.7	2.8	2.7	2.5	2.3	2.2	2.0	2.4
LU	0.8 ^a	0.7 ^a	0.7 ^a	0.7	0.9 ^{i,b}	1.0	1.1	1.1	1.0	0.9	0.9	1.3
Nordic												
DK	4.7 ^a	4.6 ^a	4.2 ^e	4.1 ^e	4.1 ^e	4.4 ^e	4.3 ^e	3.8	3.2	2.7	2.4 ^e	3.2 ^e
FI	3.7	3.4	2.9	2.8	2.8	2.9	3.0	2.8	2.6	2.3	2.1	2.8
NL	3.8 ^e	3.4 ^e	3.1 ^e	3.1 ^e	3.2 ^e	3.4 ^e	3.4 ^e	3.3 ^e	2.9 ^e	2.5 ^e	2.3 ^e	2.9 ^e
SE	4.2 ⁱ	3.8 ⁱ	3.0	2.6	2.5	2.4	2.4	2.4	2.2	1.7 ^e	1.4 ^e	1.8 ^e
Mediterranean												
EL	1.1 ^a	1.0 ^a	1.0 ^a	0.8 ^a	0.8 ^a	0.8 ^a	0.9 ^e	0.9 ^e	0.8 ^e	0.8 ^e	1.1	0.9 ^e
ES	2.2 ⁱ	2.2 ⁱ	2.1 ⁱ	2.1 ⁱ	2.1 ⁱ	2.1 ⁱ	2.1	2.1	2.1	2.2	2.6	3.7
IT	1.0 ⁱ	1.2 ⁱ	1.4 ⁱ	1.2 ⁱ	1.2 ⁱ	1.2	1.2	1.1	1.0	0.8	0.9	1.8
PT	1.3 ⁱ	1.3 ⁱ	1.4 ⁱ	1.5	1.5	1.8	1.8	1.9	1.8	1.5	1.5	2.1
Anglo-Saxon												
IE	2.6 ^a	2.2 ^a	1.6 ^a	1.7 ^a	1.7 ^a	1.6 ^a	1.6	1.5	1.5	1.6	2.1	3.5
UK	0.8 ^c	0.8 ^c	0.8 ^c	0.7 ^c	0.6 ^c	0.6 ^c	0.6 ^e	0.6 ^e	0.5	0.5	0.5 ^e	0.7
New Member States												
BG	.	.	.	.	.	.	0.8	0.7	0.6	0.5	0.5	0.7
CY	.	.	.	.	.	.	.	.	0.7	0.6	0.5	0.7 ^p
CZ	0.3 ^a	0.5 ^a	0.5 ^a	0.4 ^a	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.7
EE	.	.	0.3 ^c	0.3 ^c	0.3 ^c	0.3	0.2	0.2	0.2	0.1	0.3	1.5
HU	0.8 ^a	0.9 ^a	0.8 ^a	0.8 ^a	0.9 ^a	0.7 ^a	0.7	0.7	0.6	0.6	0.6	1.0
LT	.	.	.	.	.	0.3	0.3	0.4	0.4	0.4	0.4 ^e	0.9
LV	.	.	.	.	.	0.5	0.5	0.5 ^e	0.5 ^e	0.5	0.5	1.3
MT	.	.	.	.	.	.	.	.	0.6	0.5	0.5	0.5
PL	1.0 ^a	1.0 ^a	1.0 ^a	1.2 ^a	1.3 ^a	1.4 ^a	1.4 ^a	1.3	1.2	1.0	0.9	1.6 ^f
RO	.	.	.	.	.	0.6	0.6	0.6	0.4	0.3	0.3	0.4
SI	.	.	.	.	.	0.6	0.6	0.7	0.7	0.5	0.4	1.0
SK	0.9 ^a	0.9 ^a	0.8 ^a	0.6 ^a	0.5 ^a	0.4 ^a	0.5	0.6	0.7	0.6	0.7	0.9

Source: Eurostat LMP database, OECD database, national sources, calculations by Ecorys;

.: Not available, e: estimate by national respondent, b: break in series, p: provisional data; r: before a revision of March 2012

i: Ecorys imputed values for some measures; a: OECD data used, c: national data used.

In 1998, spending on labour market policies (LMPs) reflected the number of measures and the generosity of benefits rather than the unemployment situation. Spending was highest in the four Nordic countries whilst the Czech Republic and Estonia devoted only around 0.3 per cent of GDP to labour market policies. In 1998, spending was also low in other new Member States, the UK, and the Mediterranean countries except Spain. The low spending in Luxembourg in 1998 can be attributed to the low unemployment level at that time.

Between 1998 and 2007, spending on LMPs in the continental countries followed the stable pattern of the unemployment rate, except in Germany where spending dropped by 40 per cent, mainly after the Hartz reforms of 2004. Among the Nordic countries, spending on LMPs also declined by 40 per cent and even by 60 per cent in Sweden. The drop in spending was far greater than the drop in the Nordic unemployment rates. In Mediterranean countries spending on LMPs remained stable despite declining unemployment rates. The decline of spending on LMPs in Ireland can be attributed to a drop in unemployment rates, and in the UK to a number of budget cuts. Of the new Member States, most countries spent increasing budgets per unemployed. The most notable exception is Slovakia, where the unemployment rate in 2000 was the highest in the EU and where access to early retirement and to a lesser extent to the material needs benefit was reduced in 2000.

In 2008/2009 the reaction of LMP spending was mildest in all of the continental and Nordic countries, but also in Greece and Portugal. Spending generally increased the most in 2008/2009 in the countries where unemployment rates rose sharply: Spain, Ireland and the three Baltic countries.

Spending increased sharply in Italy due to expanding eligibility to the ordinary unemployment rate, whereas in Denmark spending rose marginally despite a sharp increase in the unemployment rate. Therefore, although the strongest developments in spending are related to the levels of the unemployment rate, national policies also have a significant impact on incurred spending.

The examples of Estonia and Italy illustrate most clearly that very tight access to unemployment benefits in times of low unemployment rates does not imply that low contribution rates are required, as the country may expand access to benefits in times of crisis (Italy), or may facilitate dismissals in a move towards the flexicurity concept (Estonia) – see also Chapter 5.

Table 2.4 compares the situation of 2009 with that of 1992 for 13 countries with internationally comparable data on unemployment rates in 1992. In these 13 countries the average unemployment rate was 9 per cent in both 1992 and 2009. Between 1992 and 2009 the strongest reduction in labour market expenditures occurred in Sweden, the UK, and to a lesser extent in the other Nordic countries and Germany. Sweden and Germany were able to reduce expenditures even despite higher unemployment rates in 2009. We therefore examine the labour market policy reforms in Sweden, the UK and Germany in closer detail.

A series of reforms in Sweden in the late 1990s can explain this reduction, including a reduction of the replacement rate from 90 per cent to 75 per cent of previous earnings, a reduction of basic allowances to half the unemployment insurance in 1995, sanctions on job refusals in 1996 and limiting renewal of benefits to only once instead of every time after participating in an active programme in 2000 (Duman, 2005).⁵⁴ Nevertheless, including disability benefits and family allowances, Sweden still spends the highest share of GDP on social policies, as was shown earlier in Figure 2.6.

⁵⁴ Duman, A. (2005), Unemployment compensation in Sweden, Germany and United Kingdom: is there a tendency towards marketization?", paper presented at ESPANet Young Researchers Workshop.

Table 2.4 Unemployment rates and share of GDP spent on labour market measures, 1992 and 2009

Country	Unemployment rate			% of GDP spent on LMP		
	1992	2009	Ratio 2009/1992	1992	2009	Ratio 2009/1992
Continental (excl. AT)						
BE	7.1	7.9	1.11	3.9	3.7	0.95
DE	6.6	7.8	1.18	3.4	2.5	0.71
FR	9.8	9.5	0.97	2.6	2.4	0.93
LU	2.1	5.1	2.43	0.7	1.3	1.74
Nordic						
DK	8.6	6.0	0.70	6.5	3.2	0.49
FI	11.7	8.2	0.70	5.2	2.8	0.53
NL	4.9	3.7	0.76	3.7	2.9	0.77
SE	5.6	8.3	1.48	5.2	1.8	0.35
Mediterranean (excl. EL)						
ES	14.7	18.0	1.22	3.9	3.7	0.96
IT	8.8	7.8	0.89	1.1	1.8	1.59
PT	4.1	10.6	2.59	1.1	2.1	1.87
Anglo-Saxon						
IE	15.4	11.9	0.77	4.1	3.5	0.86
UK	9.8	7.6	0.78	1.7	0.7	0.40

In the UK the reduction of expenditures on labour market measures by 60 per cent is almost three times as large as the reduction in unemployment rate from 9.8 per cent in 1992 to 7.6 per cent in 2009. In the UK unemployment assistance levels were reduced and access was limited in the 1990's, culminating in the 1996 Job Seeker's Allowance, and make-work-pay strategies were introduced from 1997 (Duman, 2005).

In Germany the reduction of expenditures on labour market measures was achieved despite higher unemployment rates in 2009. In Germany, benefits were reduced gradually as from 1993 with stricter work requirements. The German Employment Promotion Reform Act of 1997 introduced stricter job acceptance criteria and the requirement to prove job search (Duman, 2005). But the most radical reforms in Germany were the Hartz reforms of 2003 and 2004, significantly reducing unemployment benefits, and putting the responsibility for activation partly in the hands of municipalities.

Table 2.5 extends the breakdown of expenditures in countries to various types of measures in 2009. In 2009, spending on LMPs was highest in Belgium, Spain, Ireland and Denmark. The high spending in the three Baltic countries Estonia, Lithuania and Latvia can be attributed to the increase in unemployment benefits. The relatively high spending in the Continental and Nordic countries reflect the importance these countries assign to a mix of active and passive measures.

On the other hand, active measures were hardly used in 2009 in Estonia and Romania, or in the small island countries of Cyprus and Malta. The impact of different degrees of activation on subsequent unemployment rates is however impossible to tell from aggregate figures. For example the unemployment rate increased in Estonia (from 5% in 2008 to 14% in 2009 and 17% in 2010, see Table 2.2) and also in other countries with low spending on active measures: Bulgaria (from 6% to 7% and 10%), Greece (from 11% to 18% and 20%) and Lithuania (from 6% to 14% and 18%).

However the unemployment rate remained stable in Romania at 6-7% despite low spending on active measures.

However, from these rising unemployment rates we cannot necessarily conclude that active measures could have been effective. The new Member States Poland (training), Hungary (direct jobs) and Slovenia (training, employment incentives and start-up incentives) placed large numbers of newly unemployed workers in active measures and the rise of the unemployment rate in all three countries was limited in 2009. However, the unemployed workers were possibly simply “locked” in active programmes, the cost increased sharply and the unemployment rates increased further in 2010 as in most other EU countries.

Table 2.5 Expenditures on measures as a percentage of GDP, per country (2009)

	Active measures							Passive measures		Total ^f
	Empl-Ser-vices	Train-ing	Job rota-tion	Employ-ment incentives	Supported work and rehabili-tation	Direct job creation	Start-up incen-tives	Out-of-work income support	Early retire-ment	
EU-27	0.23 ^e	0.23 ^e	0.00	0.13	0.08	0.07	0.04	1.32	0.08	2.17
EU-15	0.24 ^e	0.23 ^e	0.00	0.13	0.08	0.07	0.04	1.39	0.08	2.26
Continental										
AT	0.19	0.52	0.00	0.05	0.04	0.05	0.01	1.31	0.18	2.35
BE	0.22	0.16 ^e	-	0.52	0.14 ^e	0.37	0.00	1.62	0.76	3.79
DE	0.37 ^e	0.35 ^e	0.00 ^e	0.11 ^e	0.04 ^e	0.06 ^e	0.07	1.47 ^e	0.06	2.52 ^e
FR	0.26	0.36 ^e	-	0.10	0.07	0.15	0.04 ^e	1.40	0.02	2.40
LU	0.05 ^e	0.03	-	0.28	0.01	0.05	0.00	0.70	0.17	1.29
Nordic										
DK	0.31	0.30	0.00	0.19	0.68	-	-	1.29 ^e	0.44	3.21 ^e
FI	0.13	0.43	0.05	0.08	0.09 ^e	0.08	0.02	1.49	0.41	2.77
NL	0.39 ^e	0.13 ^e	-	0.16 ^e	0.50	-	-	1.70 ^e	-	2.87 ^e
SE	0.41 ^e	0.06 ^e	-	0.37 ^e	0.22	-	0.01 ^e	0.72	-	1.80 ^e
Mediterranean										
EL	0.01 ^e	0.02 ^e	-	0.10 ^e	-	-	0.09 ^e	0.69	0.00	0.91 ^e
ES	0.13	0.18	0.01	0.26	0.03	0.08	0.10	2.92	0.04	3.75
IT	0.03	0.16	0.00	0.15	-	0.01	0.02	1.28	0.10	1.75
PT	0.12	0.43 ^b	-	0.12	0.04	0.04	0.00	1.20	0.10	2.06 ^b
Anglo-Saxon										
IE	0.20	0.34	-	0.05	0.01	0.26	-	2.56	0.06	3.47
UK	0.29	0.02 ^e	-	0.01 ^e	0.01 ^e	0.00 ^e	-	0.33	-	0.66
New Member States										
BG	0.04	0.01	-	0.04	0.00	0.17	0.00	0.38	-	0.65
CY	0.04 ^e	0.02	-	0.05	0.01	-	0.00	0.59 ^p	-	0.70 ^p
CZ	0.13	0.00	-	0.01	0.07	0.01	0.00	0.44	-	0.66
EE	0.09	0.13	-	0.00	0.00	-	0.02	1.26	-	1.50
HU	0.09	0.05	-	0.07	-	0.23	0.01	0.53	-	0.98
LT	0.10	0.08	0.00	0.09	0.01	0.02	-	0.61	-	0.91
LV	0.04	0.15 ^e	-	0.03	-	0.09	0.00	1.03	-	1.34

	Active measures							Passive measures		Total*
	Empl-Ser-vices	Trai-ning	Job rota-tion	Employ-ment incentives	Supported work and rehabili-tation	Direct job creation	Start-up incen-tives	Out-of-work income support	Early retire-ment	
MT	0.10	0.01	-	0.02	-	0.00 ^e	0.00	0.37	-	0.51
PL	0.10 ^e	0.67 ^r	-	0.16	0.21	0.03	0.08	0.21	0.12	1.59 ^r
RO	0.03 ^e	0.00	-	0.03	-	0.01	0.00	0.38	-	0.46
SI	0.10	0.07	-	0.05	-	0.06	0.06	0.63	-	0.96
SK	0.07	0.01	-	0.03	0.03	0.01	0.07	0.29	0.38	0.89

The total includes expenditures on labour market services.

E: estimate, b: break in series (Portugal training), p: provisional data (Cyprus out-of-work income support); r: before revision.

A conclusion that can be drawn from the experiences of individual countries is that spending on LMPs largely follows unemployment rates unless eligibility is broadened or tightened in times of crisis. A related conclusion is that countries with the tightest access to benefits tend to be more prone to broaden access in times of high unemployment, as the Italy example shows, but also the US as shown in the previous section. The main implication is that countries need to prepare for higher expenditures in times of high unemployment, even if access to benefits is very restricted.

2.17 Costs per participant

The costs per participant are calculated as the expenditures converted into 2009 constant euro values divided by the number of participants. Given limitations in the available information on the participants in labour market policies prior to 1998, this part of the analysis focuses on the trends of the last decade only. These calculations correct for exchange rates and inflation, but not for differences in purchasing power of one euro in different countries.

The number of participants can be measured in different ways, via the stock of participants or the number of entrants. For short-term measures with a duration of a few months, the number of participants would be the most appropriate measure as the annual expenditures would be incurred for 2 or 4 “waves” of entrants, while only one wave would show up in a stock figure. For long-term measures with a duration of more than one year, the stock would be the most appropriate measure as the annual expenditures would be incurred for participants who entered in a previous year, which would not show up in the number of entrants of only the current year. As a general rule, we used the maximum of the stock count for passive measures and the maximum of the stock count and the number of entrants for active measures, whenever numbers of entrants were available for the whole period. Most of the available data covered numbers of stocks and not of entrants for the different measures. Costs per participant are therefore less comparable between measures and between countries, and more comparable over time.

Figure 2.21 depicts the total spending per participant in labour market policies per country group. In line with findings on expenditure, the Nordic group devotes the highest amount of resources for each person enrolled in some form of labour market assistance programme. However, the trend is falling and there are no visible correlations with the economic shocks of the first few years of the 21st century or the 2008 crisis. A break is notable in the beginning of the observation period, as cost per participant drops by almost 5,000 Euros within the 1998-2000 two-year time frame. The Continental group, which spends considerably less per participant than the Nordic group follows the same pattern; however, there is a small increase in relation to the most recent economic crisis. The

Mediterranean group has attributed similar resources to the Continental states; however, it is evident that the cost per participant has increased sharply since 2007. Previously we saw that the Anglo-Saxon countries spend less on labour market policies as a percentage of GDP than either the Continental or the Mediterranean groups. This is because fewer participants are admitted to the schemes. Per participant, spending on labour market policies in 2008 is actually higher in the Anglo-Saxon group compared to the Continental or Mediterranean groups. Finally, the new Member States display a rising trend. The expenditure per participant for this group of countries is very low compared to the other EU Member States, but it should be kept in mind that spending is not corrected for differences in purchasing power.

Figure 2.21 Total LMP costs per participant, 1998-2009

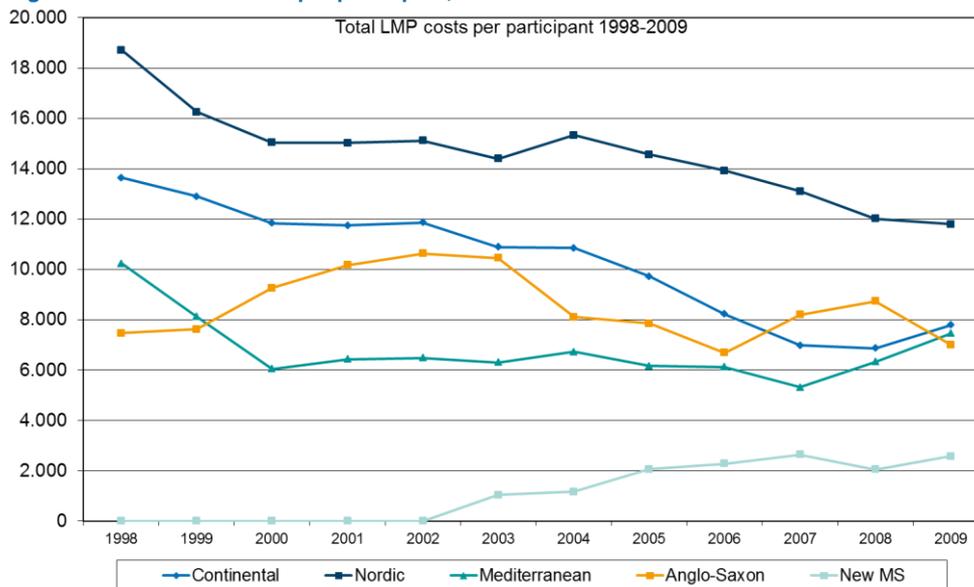


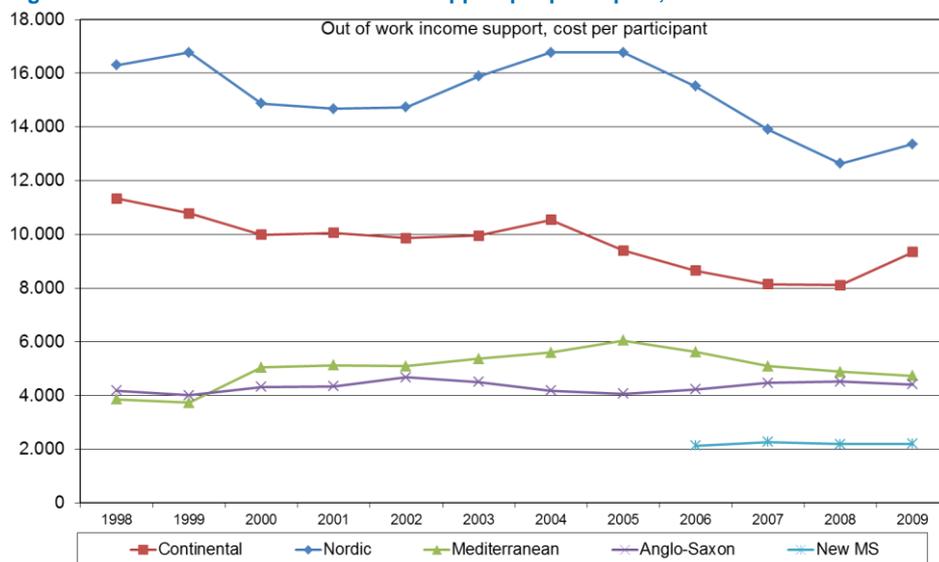
Figure 2.22 shows the costs of out-of-work income support related to the stock number of participants with the exception of Spain where the number of entrants is used, since in Spain the number of entrants is on average three times as high as the stock figure. The costs of out-of-work income support per beneficiary based on the Eurostat LMP are similar to the outcomes of the OECD tax benefit model for single-earner married couples. In the Nordic countries the costs are slightly overestimated, partly because according to the OECD tax benefit models Denmark taxes annual benefits of an average 20,000 Euros for an average 5,000 Euros whereas benefits are taxed marginally or not at all in most other countries. But also, in the Nordic countries the number of entrants is roughly twice the stock figure. This means that in these countries benefits are received on average for six months per year only. In “man-year” equivalents benefits per participants in the Nordic countries are therefore roughly twice as low as shown in Figure 2.22. Finally, we note that benefit levels are quite higher in two smaller and richer countries. According to the OECD tax benefit models, Luxembourg and Ireland have higher benefit levels of 11,000-16,000 Euros for single persons and even 20,000-27,000 Euros for married couples.

It is evident that benefit levels in the Nordic countries are highest but have been decreased over time. Changes in the benefit levels can be traced to reforms. In Finland, the benefit level for the first 150 days of unemployment was increased in 2003 from 52% to 60% of the last-earned wages while at the same time the severance pay was abolished. Figure 2.22 shows an increase in benefit expenditures in 2003 and 2004. In the Netherlands the maximum unemployment duration was reduced from five years to three years and two months in 2006 whilst for the first two months the replacement rate was increased from 70% to 75%. In 2007 Sweden reduced the replacement rate from 75% to 70% after 200 days and to 65% after 300 days of unemployment whilst increasing the

benefit level to 80% for the first 200 days. The chart shows a drop in out-of-work income support per beneficiary in 2006-2008.

In the Continental countries, we again see the effect of the Hartz reforms in 2004. In the Mediterranean countries expenditures per beneficiaries increased from 4,000 to 6,000 per participant in the Mediterranean countries between 1999 and 2005 but then dropped back almost to the 1998 level. This development is largely driven by Spain, where incentives were introduced in 1997 to convert temporary jobs into permanent jobs, with further reforms in 2001 and 2006 to extend the incentives to other groups of workers. Between 1998 and 2005 the number of short unemployment durations within a year decreased, but at the same time more workers that become unemployed were entitled to benefits. After 2005 the number of short unemployment spells increased again. The use of unemployment benefits for shorter durations lowered the expenditures per beneficiary again. In the Anglo-Saxon and new Member State countries the expenditures per participant have remained stable at low levels.

Figure 2.22 Costs of out-of-work income support per participant, 1998-2009



With respect to early retirement (Figure 2.23), the costs per participants were similarly high in 1998 in the Nordic and the Continental countries. From 2002 less use was made of the relatively expensive schemes in France and Belgium, namely the job-substitution allowance in France and the benefits for older workers exempted from job applications in Belgium. Since the UK has no early retirement scheme, the picture for the Anglo-Saxon countries is that of Ireland where expenditures on the pre-retirement allowance have increased almost every year with a stable number of beneficiaries. In the Mediterranean and new Member States, expenditures per participant remained more or less constant at low levels.

Figure 2.23 Costs of early retirement per participant, 1998-2009

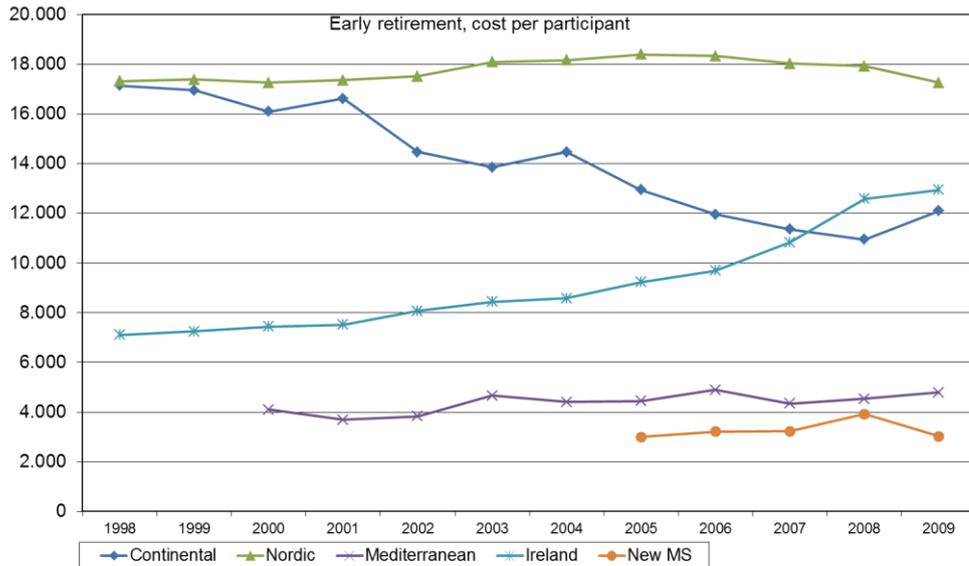
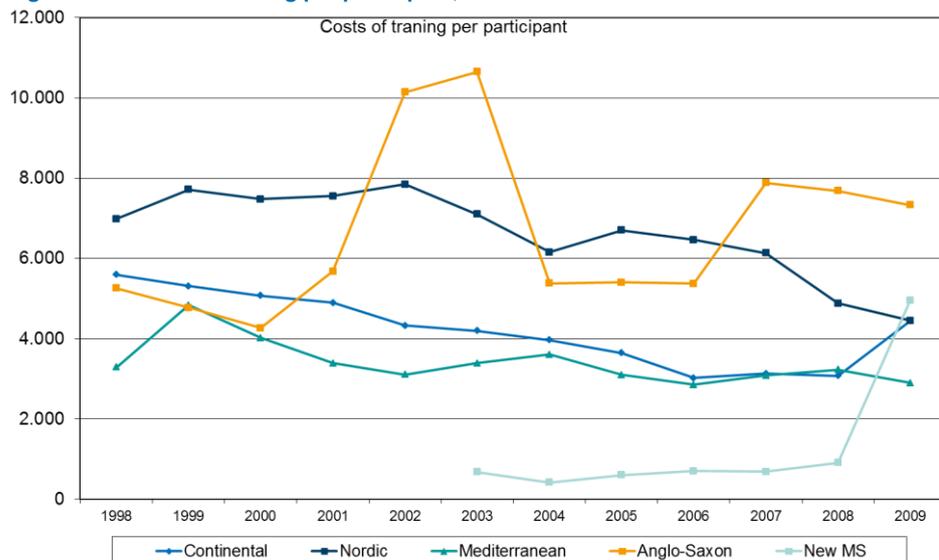


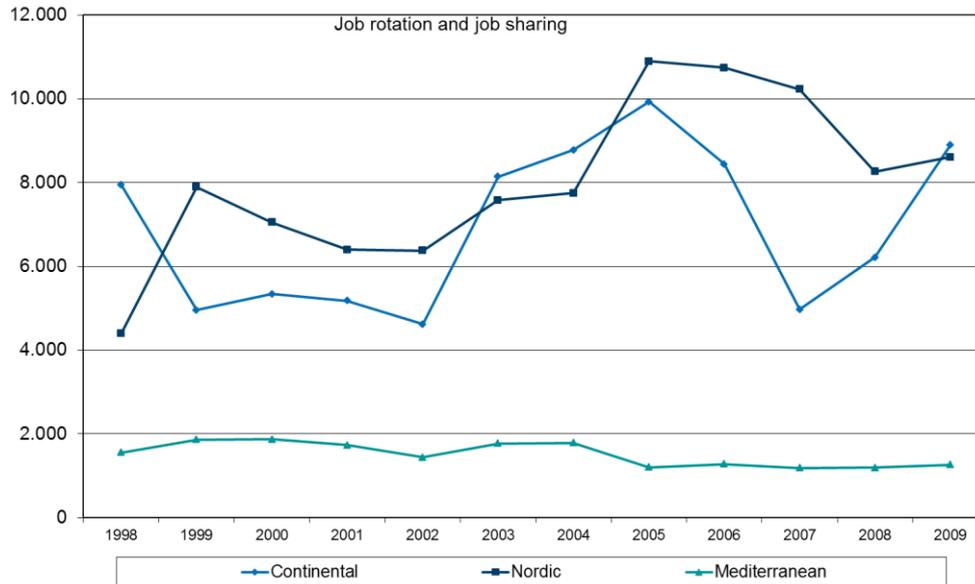
Figure 2.24 shows the costs per participant for each country group for the training category. In general, annual costs per participant in this category have not exceeded 8,000 Euros, with the exception of 2002 and 2003 for the Anglo-Saxon group when the cost exceeds 10,000 Euros. However, this group substantially reduces the amount per participant, and in 2004 the costs are already at their 2001 level. 2007 marks a second increase in the cost, which brings the amount close to the 8,000 Euros. The trend in training costs per participant for the Nordic and Continental countries reveals that they have decreased throughout the entire last decade and are around 4,400 Euros per person enrolled in a training programme in 2009, with a sharp increase in 2009 in the Continental countries. The sharp increase in 2009 in the new Member States can be traced down to Poland, although the increase would be less sharp according to revised figures of March 2012. The Mediterranean states display a stable trend and do not seem to react to external shocks by decreasing the spending per participant. One possible explanation for this is the substantial amount of resources devoted to the new Member States through the European Social Fund, which fosters human resource development through various training programmes.

Figure 2.24 Costs of training per participant, 1998-2009



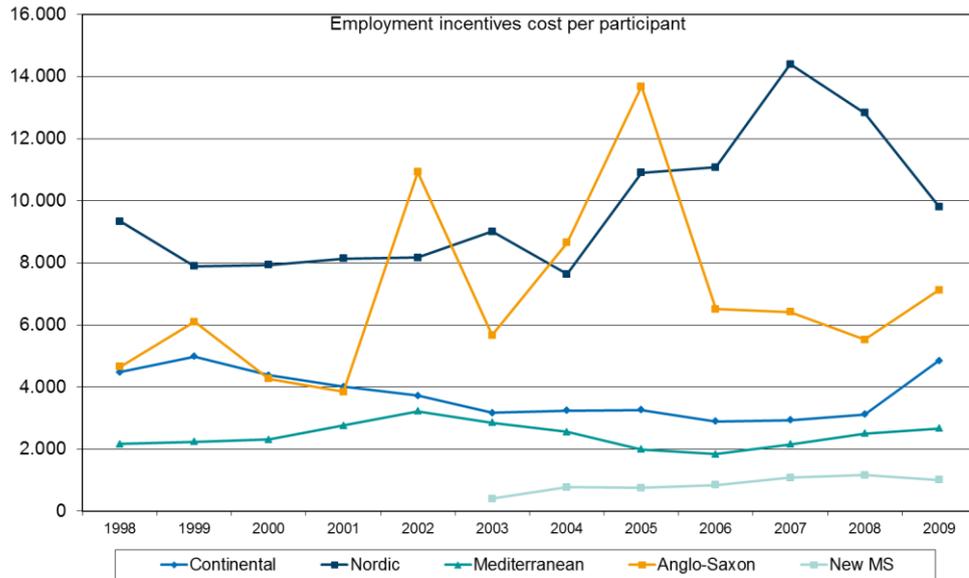
With regard to job rotation and job sharing, only three country groups have this kind of labour market policies in place (Figure 2.25) and in terms of expenditures this is a minor measure in those countries. Per participant, the Nordic states spend most on these programmes, with costs per participant reaching almost 11,000 Euros in 2005, but then falling to about 8,600 Euros in 2009. For the Continental states, participants in job rotation programmes received between 5,000 and 10,000 Euros. Despite a relatively small cost per participant, the Mediterranean states are the only country group to demonstrate some stability with regard to this category for active labour market policies.

Figure 2.25 Costs of job rotation and job sharing per participant, 1998-2009



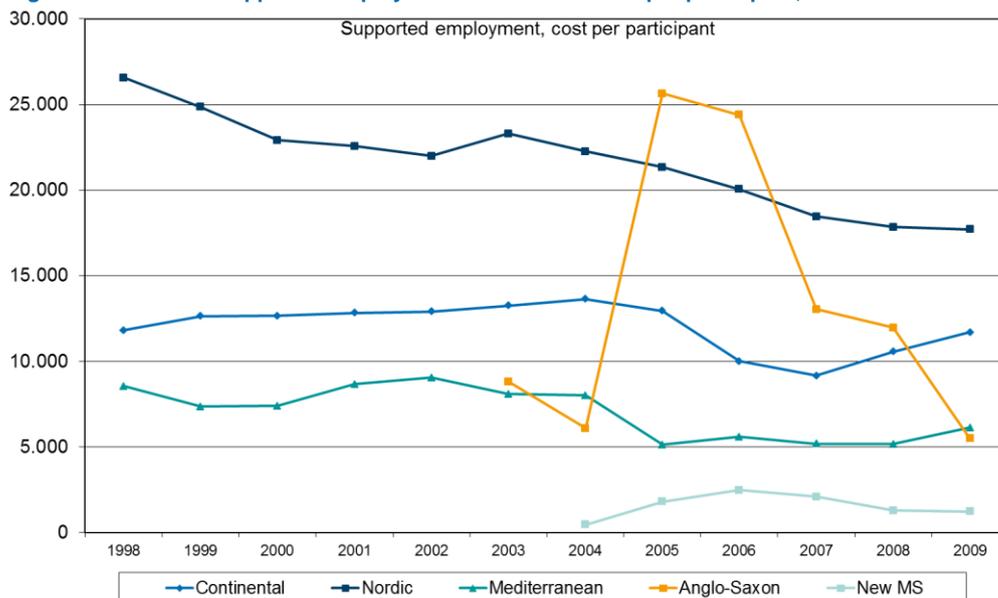
Employment incentive measures appear to assume very different amounts of resources per participant for the different country groups. Whilst the Mediterranean and the Continental states have a gradually changing spending pattern ranging between 2,000 and 5,000 Euros per participant, the Nordic and the Anglo-Saxon states seem to vary in terms of volume and generosity of programmes that focus on employment incentive measures. The United Kingdom and Ireland record peak costs per participant for 2002 and 2005, both followed by substantial drops of more than 4,000 Euros per participant in each case. Both the expenditures and the number of claimants of employment incentives seem hard to predict from the underlying data in the Anglo-Saxon countries. Cost per participant was on the rise in the Nordic states between 2004 and 2007, but fell sharply in the last two years. Given the fall in expenditures recorded for this group, it appears that employment incentives are one of the labour market categories that reacted to the latest economic crisis in the Nordic group.

Figure 2.26 Costs of employment incentives per participant, 1998-2009



Cost per participant in supported employment and rehabilitation was highest in the Nordic countries, although it declined from 27,000 Euros in 1998 to 18,000 Euros in 2009. In contrast, albeit much lower in absolute terms, cost per participant for this category was stable between 1998 and 2005, falling in 2006 and 2007 but picking up again in 2008 and 2009. The Mediterranean states register a generally stable trend, except for a drop in expenditures per participant in 2005. In the UK the registered stock of participants differs extremely from one year to the next. Despite this, we can conclude that whilst the Anglo-Saxon countries spend less on supported employment as a percentage of GDP compared to Continental and Mediterranean countries, they spend more per participant. The figures for the New Member States show a trend break in 2008, the first year for which numbers of participants were available in Poland. Roughly 90 per cent of the expenditures and participants of this measure are found in Poland.

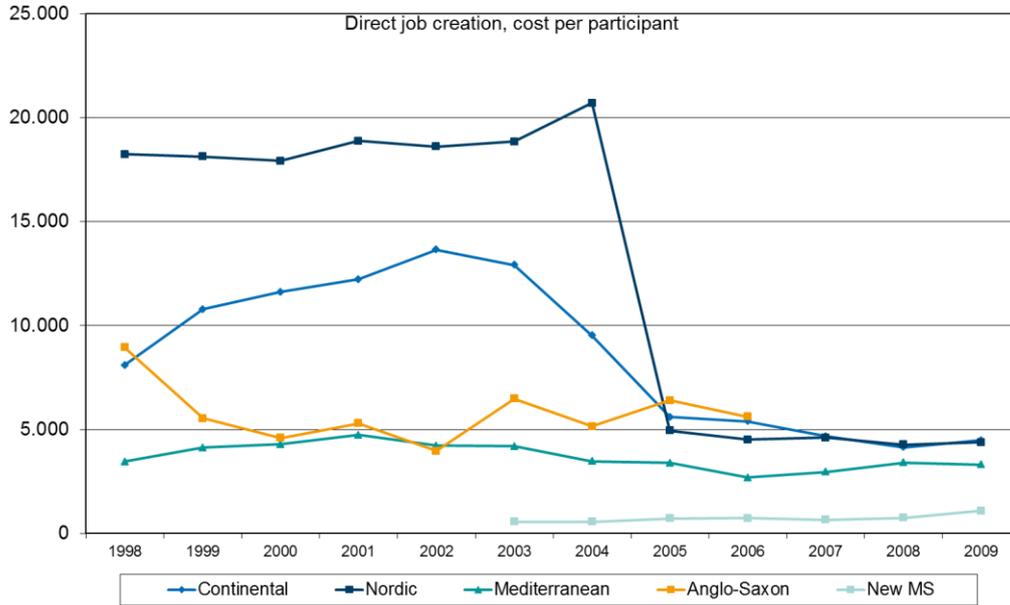
Figure 2.27 Costs of supported employment and rehabilitation per participant, 1998-2009



Direct job creation was one of the more expensive measures until 2003 or 2004. Direct job schemes were phased out in Continental countries as from 2004. The sudden drop in Nordic countries is explained by the clean break of the Netherlands. The costs per participant were also

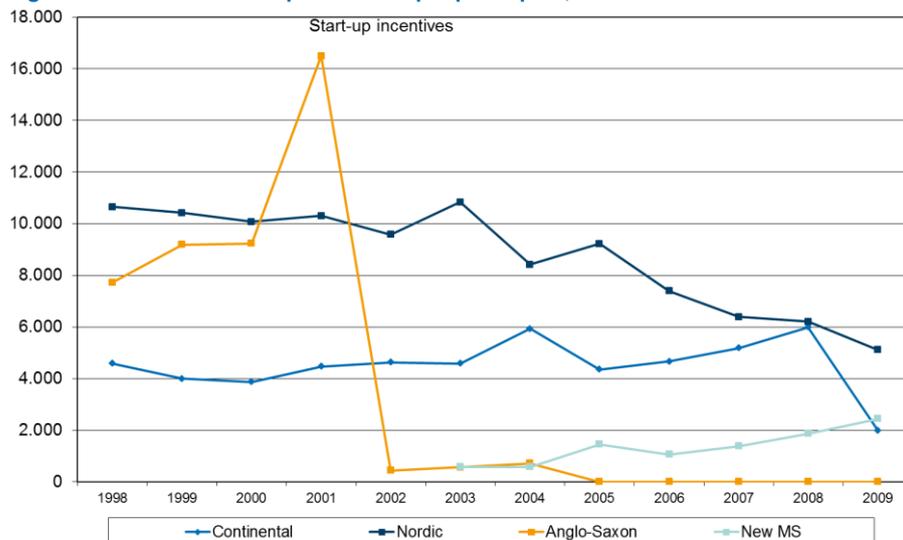
similar in the Anglo-Saxon countries in 2006, the last year for which numbers of participants were available for the UK, and lower in Spain and especially in the new Member States. For the new Member States, we left out Slovakia where the 100 Euros per participant is obviously in addition to the benefit.

Figure 2.28 Costs of direct job creation per participant, 1998-2009



Start-up incentives are the second smallest active labour market category after job rotation, which assumes a very low share of overall spending. Ireland had a Back to Work Enterprise allowance which was discontinued in 2002 and the UK Youth Enterprise Initiative was stopped in 2005. The Nordic countries also appear to devote less funds per recipient of start-up incentive programmes. At the same time, the Continental and the new Member States show an upward trend in terms of spending per participant, although in the Continental countries expenditures per participant dropped sharply in 2009. The Mediterranean countries have been omitted from this chart due to issues of data reliability.

Figure 2.29 Costs of start-up incentives per participant, 1998-2009

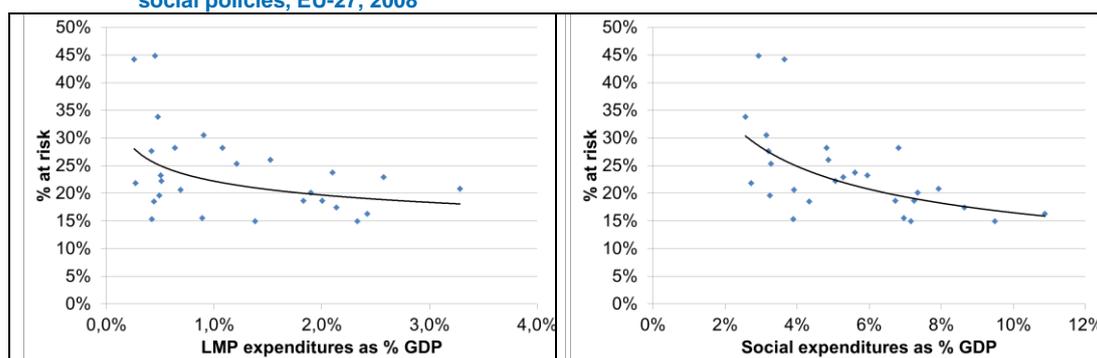


2.18 Social inclusion indicators

The previous sections analysed the trends in labour market measure expenditures. In this section we relate expenditures to social inclusion indicators. Especially income support can be expected to reduce the number of persons at risk of poverty, as well as the gap between rich and poor. In this section we analyse whether a higher share of GDP spent on labour market measures does indeed have a positive correlation with the percentage of persons at risk of poverty and the gap between rich and poor. However, other social policies such as housing and family allowances, disability benefits and social assistance, are also likely to have an impact on the risk of poverty and the distribution of income. The drawback of analysing a correlation is that a correlation does not imply a causal relation one way or the other. Nevertheless, a correlation does allow for certain conclusions.

Persons at risk of poverty are defined by Eurostat as people in households with less than 60 per cent of the median household income in a country. Figure 2.30 shows that expenditures on labour market policies reduce the risk of poverty. However this relationship is quite weak because the share of GDP spent on labour market policies explains only 13 per cent of the variance of the share of persons at risk (adjusted R^2); an additional percentage point of GDP spent on labour market policies reduces the share of persons at risk of poverty by 0.2 to 7.1 percentage point.⁵⁵ Thus, the estimated impact varies from virtually none to extremely large.

Figure 2.30 Percentage of persons at risk of poverty and expenditures on labour market policies and social policies, EU-27, 2008



Source: Eurostat EU-SILC database, LMP database and ESSPROS database, own calculations.

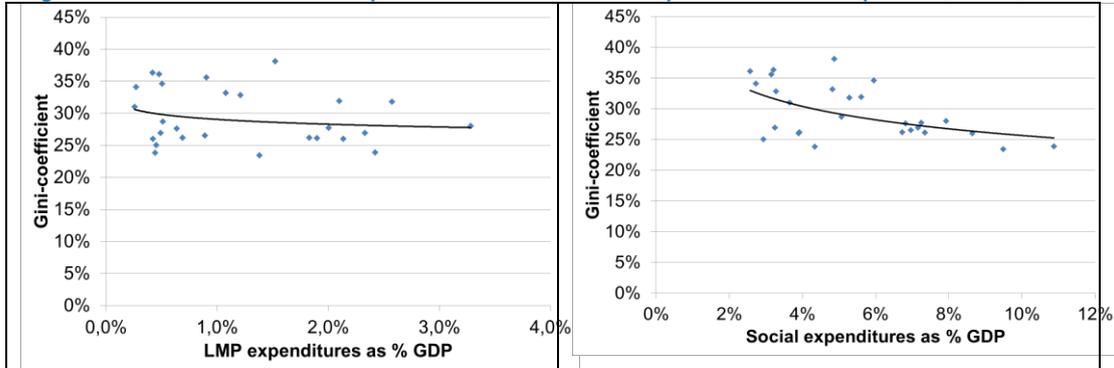
Social expenditures are defined as the sum of expenditures on measures for the unemployed, the disabled, social exclusion, family and housing allowances (ESSPROS definition). Roughly speaking, the ESSPROS measures for the unemployed compare to the active and passive measures analysed in this report.

The reason why expenditures on labour market policies are a poor predictor of the risk of poverty is that labour market policies are only a small part of all policies for income support. Leaving aside major policies such as old age pensions and health care, expenditures on social assistance and housing allowances are relatively small compared to labour market policies as shown in Figure 2.5. However both expenditures on disability benefits and on family allowances are on average of equal magnitude as labour market policies. The relation between the risk of poverty and aggregate spending on the five social policies unemployment, disability, social exclusion, family and housing allowances is much stronger. The share of GDP spent on these five social expenditures explains 30 per cent of the variance of the share of persons at risk; an additional percentage point of GDP spent on social policies reduces the share of persons at risk of poverty by 0.8 to 3.2 percentage point.

⁵⁵ Based on a 95% confidentiality interval.

The Gini-coefficient can be used to assess the relation between expenditures on labour market policies and equity. It is a measure between 0 and 1, with 0 indicating perfect income equality and 1 indicating that one person has all the income. The higher the Gini-coefficient, the more unequally income is distributed. The relation between expenditures on labour market policies and the Gini-coefficient turns out to be completely insignificant; the expected value of the Gini-coefficient in the EU-27 is 0.29 regardless of the share of GDP spent on labour market policies, as Figure 2.31 shows.

Figure 2.31 Gini-coefficient and expenditures on labour market policies and social policies, EU-27, 2008



Source: Eurostat EU-SILC database, LMP database and ESSPROS database, own calculations.

Social expenditures are defined as the sum of expenditures on unemployment and disability benefits, social exclusion, family and housing allowances.

Expenditures on social policies can explain a robust 26% of the variance of the Gini-coefficient; an additional percentage point of GDP spent on social policies reduces the Gini-coefficient by 0.4 to 1.7 percentage point.

The main conclusion is that the impact of labour market policies on poverty and equity can only be analysed as part of a broader package of social measures including disability benefits and family allowances, and to a lesser extent social assistance and housing allowances. Higher aggregate expenditures on these five social policies go together with a lower risk of poverty and more income equality.

The causal relationship could go either way. On the one hand it is possible that the combined social policies are effective in reducing the risk of poverty and income inequality. On the other hand it is also possible that countries that already have a lower risk of poverty and more equally distributed income can afford to spend a higher share of GDP on these five social policies. This would naturally be the case for countries that have a high employment rate and fewer beneficiaries. In this case the higher expenditures of GDP on the social policies would be explained by higher expenditures on active measures or more generous benefit levels. The correct underlying explanation cannot be assessed through a simple correlation.

Since even all labour market measures combined cannot explain the risk of poverty and income equality, even less can be said for active versus passive measures. However, whether the expenditures on labour market measures have a direct effect on the risk of poverty and income equality as part of a broader package or whether these expenditures are more affordable, in both cases the positive correlation between the expenditures and income equality / protection against poverty can be interpreted to validate social reasons for the expenditures on labour market measures.

2.19 Conclusions

The analysis of expenditure on labour market policies in the EU between 1985 and 2008 shows very clearly that the majority of countries and country groups have responded to the recession pressures of the early 1990s, of 2001 and most recently, of 2008, with an increase in expenditures, predominantly on passive, but also on active labour market policies. For now, the first of these recessions appears to be the one that had the highest impact on expenditures, as the data shows increases for almost every country and at almost every level (country, group, EU, as well as for different measures) in that period. The recession of 2001 is visible in all country groups except the Anglo-Saxon group, but was comparatively mild. The 2008 recession was already being felt at the time, particularly in the Anglo-Saxon and Mediterranean countries, whilst for the rest of the Member States the impacts started to show up in the 2009 data. However, expenditures in 2009 were still well below the 1992/1993 levels, more so than the unemployment rates. Particularly countries with high expenditure levels seem to have made expenditures more recession-proof compared to the early 1990s. This is evidenced with reforms in Nordic countries around the year 2000, in Germany with the Hartz reforms in the early first decade of the 21st century and in the UK with reforms ever since the late 1980s.

If anything can be concluded from the expenditure trends, it is that countries must prepare in advance for high expenditures on social security in times of high unemployment, since otherwise they risk depleted social security funds in a time when tax revenues drop and the government is called to stimulate the economy. The analysis also shows that aggregate expenditures on labour market measures, averaged per person wanting to work, increase during recessions. This indicates that governments tend to relax the eligibility criteria, increase benefit levels, extend maximum durations of benefits or tend to implement a combination of these measures. Examples from countries such as Italy and the US indicate that countries with strict targeting in times of low unemployment are more prone to extend eligibility in times of crisis. This confirms that all countries need to prepare for higher expenditures on benefits in times of crisis even if eligibility criteria are strict.

With regard to the relationship between active and passive measures, we can see that expenditures on both measures increase along with unemployment, but that expenditures on passive measures increase more sharply if the unemployment rate accelerates. This partly reflects the more discretionary powers involved with active measures. Active measures received increasing expenditures between the late 1980s and 1992, after which roughly 1 per cent of GDP was spent on active measures until 2003, whilst spending on passive measures showed a downward trend apart from deviations caused by the business cycle. Whilst ALMP spending reacted less to the business cycle than spending on passive measures already in 1993, this is even more the case during the crises of 2001 and 2008/2009. Budget pressures and (perceived) lower effectiveness of ALMPs were more likely reasons not to increase ALMP expenditures substantially during the 2009 recession than the lack of need to activate workers.

Labour market policies are only part of the social protection system in which disability benefits and family/children allowances are equally important pillars, and are even far more important in the UK and Nordic countries. Reforms to reduce expenditures generally appear to have avoided the risk of becoming communicating vessels between various forms of social protection. The trend of decreasing expenditures on passive labour market policies in the 1990s and the first decade of the 21st century did not translate into increasing expenditures on social protection beyond the scope of labour market policies, including disability benefits and family/children allowances as well as social assistance and housing allowances.

As far as different active labour market policies are concerned, training has always been the largest active measure. However, the share of expenditures on training and also on early retirement has decreased whilst the share of expenditures on labour market services has increased. This is indicative of an increasing importance attached to job placements. Another trend is a shift from direct job creation to employment and start-up incentives, which is indicative of increased focus on incentivizing job matches on the regular labour market rather than direct provision of subsidized jobs.

A further interesting finding is an apparent implementation lag, which means that expenditures increase in the year after the announcement of a new policy rather than in the same year. This indicates how difficult it is to react instantaneously to new challenges. Especially the introduction of direct job creation schemes seems to lag behind the start of a recession. One explanation could be that direct job creation is typically targeted at the long-term unemployed, whose number rises in a later phase of economic downturn. However, this comes with the risk that direct job creation prevails in times of economic recovery and therefore comes too late.

In contrast, expenditures on training and a particular type of employment incentives aimed at the preservation of jobs have increased from the start of each of the three recession periods. This was no different in 2009, although such measures were not applied in the form of active labour market measures, but rather in the form of short-time work measures (counted as a passive measure and in some countries with a requirement for employers to provide training) and exemptions from employer contributions (which do not show up in expenditures at all). These types of measures aim to retain workers in their jobs in times of a – temporary - crisis and to avoid costly re-adjustments when the crisis ends.

A rapid expansion of active measures as in Poland (training), Hungary (directly created jobs) and Slovenia (training, employment incentives and start-up incentives) in 2009 could limit the increase of the official unemployment rate if they are not counted as being unemployed. This, however, comes at the expense of increasing expenditures.

Finally, higher expenditures on labour market measures, as part of a broader package of disability benefits, family allowances and to a lesser extent social exclusion and housing allowances, go together with (1) lower risk of poverty and (2) more income equality. This could either mean that countries with a lower risk of poverty or more income equality can afford to spend a higher share of GDP on labour market measures, or that labour market measures are effective in reducing the risk of poverty and income inequality. In both cases, the relation can be interpreted to validate labour expenditures on labour market measures for social reasons, either for their effectiveness or for their affordability.

In summary

Expenditures on both passive and active measures increase in times of crisis, most notably in those of the early 1990s and in the recent crisis starting in 2008. However, compared to the early 1990s many Member States have made expenditures more ‘recession-proof’.

Higher expenditure on **passive measures** in times of crisis is largely the result of automatic mechanisms, i.e., an increasing number of claims that in principle need to be awarded. In addition though, governments and in particular governments with less generous access or welfare systems, also increase entitlements (level, duration) to make up for the smaller chances of finding work again at short notice. A reduction in expenditure on passive labour market policies is not compensated for by other social expenditures, such as disability benefits, social assistance or family allowances.

Finally, higher expenditures on social protection in its broadest sense are associated with lower rates of at-risk-of-poverty rates and with more income equality.

Expenditures on **active measures** increase less sharply, which may be explained by the fact that governments have more discretionary powers over their deployment. In the latest crisis they used this power more than before, reflecting perhaps lower expectations of the impacts and a higher pressure on budgetary discipline demanded in the Euro zone. Expenditures on active measures in the past decade shifted towards measures that support direct re-entry into the labour market and towards measures promoting the acceptance of regular jobs rather than the provision of fully subsidized work.

3 Funding and institutional settings

3.1 Introduction

This chapter discusses how funding and institutional settings and in particular institutional responsibilities compare, and how availability of the necessary funds is managed in times of crisis. This chapter seeks to answer the following questions:

1. Is the funding through social security contributions and funds built up over time, or out of general taxation and the current government budget?
2. What is the nature of the contributions (compulsory, voluntary) and taxes?
3. Are active and passive measures funded separately?
4. Is early retirement funded separately from unemployment insurance? If not, are unemployment insurance funds sufficient to finance early retirement of an ageing workforce?
5. How is the burden of early retirement shared amongst the population?
6. Is early retirement used as a means to dismiss older workers and avoid dependency on unemployment benefits? What is the role of other routes into early retirement, such as disability schemes?
7. How are the funds and responsibilities for labour market policies typically organized between public / private and national / sub national actors?
8. What are the underlying budget mechanisms and incentives?
9. How does the arrangement of funding enable continued delivery in times of crisis?
10. What institutional arrangements work best to continue active policies if budgets are low?
11. Who is responsible for the delivery / implementation of measures?
12. Which policies receive priority if budgets are strained? Is a combination of active and passive measures (flexicurity) sustainable in times of crisis?

In Chapter 2 we concluded that expenditures on passive measures increase during economic recessions by 0.5 to 1 per cent of GDP. In the early 1990s, the expenditures on active measures moved jointly with expenditures on passive measures, although since the late 1990s expenditures on active measures seem more dependent on policy insights, as new active measures were introduced and some abandoned.

The observation that expenditures on passive measures increase during economic recessions raises the question how these expenditures are funded, especially because in times of an economic recession, tax revenues will fall. Social security funds could provide a solution by reserving surplus revenues from social security contributions in times of low unemployment. In Section 3.3 we describe the funding through general taxes and social security contributions. However the availability of funds also depends on how surplus revenues are invested. In Section 3.4 we will argue that the responsibility for making the funds available in times of high unemployment is more important than the responsibility for collecting revenues. This in turn raises the question of the central government budget framework or arrangements. In some countries social security is an integrated part of the general tax and expenditure framework, and an additional question is whether this arrangement could work as well.

How arrangements work, depends on the more general institutional framework. We will analyse the responsibility for delivering measures in Section 3.5. However the expenditures also depend on eligibility, benefit levels and maximum durations. In particular, the flexicurity system which is

designed to activate unemployed workers, mostly through training, with universal and continued high benefit levels, can be compared to other systems. This is discussed in Section 3.6.

3.2 Description of data

We have used Eurostat data of the labour market policy database to analyse the source of funding and the responsible institutes. The sources of funding relate to the budgets through which expenditures on a measure are financed and to the institutes responsible for delivering the measure. The calculations and the tables for both 2001 and 2008 are presented in Annex D. Further information from the OECD database on fiscal policies is used as well as country reports to DG ECFIN on fiscal policy.

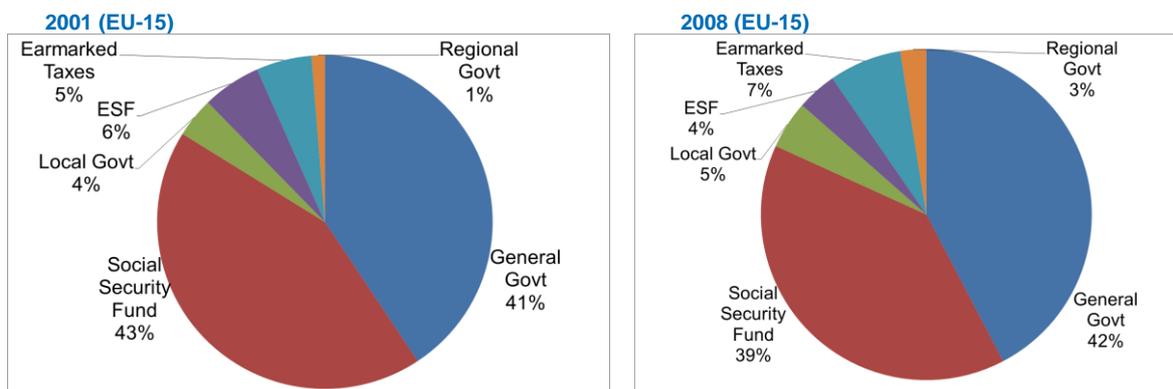
3.3 Types of funding

Different origins of funding

Across the Member States a variety of methods are deployed to source funding to the various labour market measures. In certain countries, one source contributes nearly all of the funding. Examples are the general budget in Italy and the social security funds in Germany. In other countries multiple sources are pooled together to support different labour market measures, such as in Belgium where the general budget, earmarked taxes, the regional budget and the social security funds each provide a significant share.

The overall picture is that general taxes and social security contributions both play an important role, which remained virtually unchanged between 2001 and 2008. In both 2001 and 2008, a little over 40 per cent of funding for all categories across the selected countries came from the central government budget (see graphs below), whilst a similar share came from social security funds.

Figure 3.1 Funding origin of all measures in the EU-15, 2001 and 2008

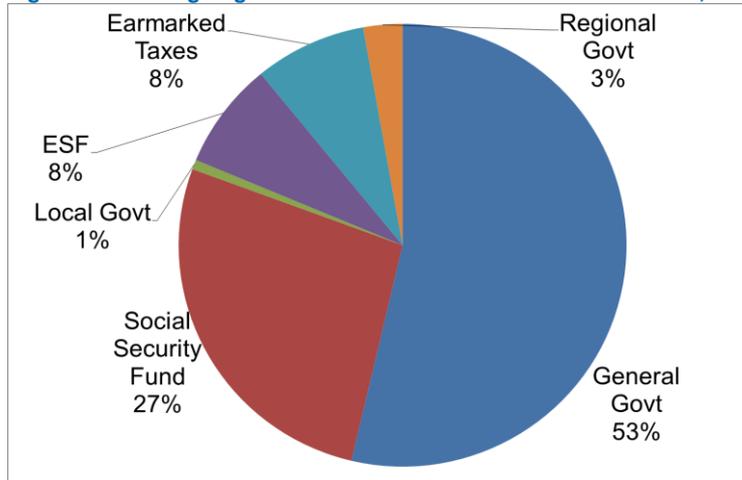


Source: EU LMP database, own calculations.

The addition of the new Member States of 2004 and 2007 to the EU-15 would not change the overall picture, since the expenditures converted in Euro values are small compared to the expenditures in the EU-15 countries. We have therefore depicted the situation in the new Member States in 2008 separately in Figure 3.2. It shows that the central government and the social security fund are also the two most important contributors in the New Member States, although with a larger role of general taxation: 53 per cent of the expenditures are funded by the government budget and 27 per cent of the expenditures are funded by the social security fund. Also, ESF has a more

important role in the new Member States compared to the EU-15 and also compared to regional and local funding.

Figure 3.2 Funding origin of all measures in the New Member States, 2008



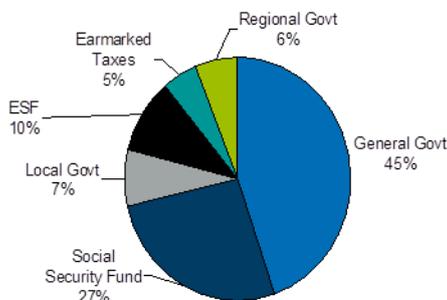
Source: EU LMP database, own calculations.

Differences between passive and active measures

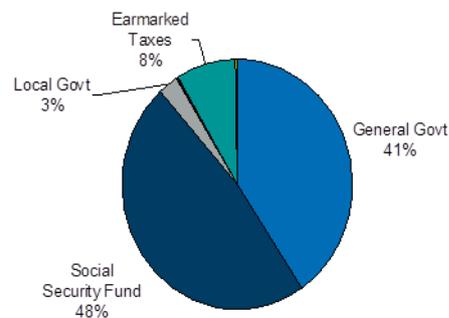
The mixed funding through general taxes and social security contributions is partly but not fully explained by differences in funding of passive and active measures. As Figure 3.3 shows, active measures are funded through different sources but most strongly through central government budgets. Passive measures are almost exclusively funded through social security funds and central government budgets together, although especially in some new Member States some of the taxes are earmarked for social protection. ESF only plays a role in the funding of active measures.

Figure 3.3 Funding origin of all measures in the EU-27 in 2008, active and passive measures

Active measures, 2008 (EU-27)



Passive measures, 2008 (EU-27)



Source: EU LMP database, own calculations.

In this analysis, passive measures include out-of-work income support, early retirement and all mixed measures.

Table 3.1 zooms in on the different types of labour market measures. It shows that the central government budget was also the largest share of funding origin for each different type of active labour market category. The social security fund is the main contributor to the funding of both out-of-work income support and early retirement. However, the role of social security funds decreases if mixed measures are included. This outcome is strongly influenced by the Netherlands and Germany where passive and active elements were integrated in the 1990s and early in the first decade of 21st century, and social assistance came with requirements to seek jobs and thus became labour market policies for which the central government assumed responsibility.

ESF funding is mostly used for training and employment incentives. Between 2001 and 2008 ESF funding shifted somewhat from direct job creation to start-up incentives. Lastly, it is noteworthy that regional and local governments have not been large contributors to passive labour market measures although local governments contribute a little over 25 per cent to supported employment and rehabilitation.

Minor variations per measure can be noted over the years, most notably:

- For training: a shift from social security fund in 2001 to ESF and regional budgets in 2008;
- For supported work and rehabilitation: from the social security fund to general taxes;
- For direct job creation: from the central government to the local government budget;
- For start-up incentives and out-of-work income support: from central government budgets to the social security fund.

Table 3.1 Share of funding origin per category

Category	Central government budget		Social Security Fund		Local government budget		ESF		Earmarked taxes		Regional government budget	
	2001	2008	2001	2008	2001	2008	2001	2008	2001	2008	2001	2008
	EU-15	EU-27	EU-15	EU-27	EU-15	EU-27	EU-15	EU-27	EU-15	EU-27	EU-15	EU-27
1. Labour market services	46%	44%	32%	33%	1%	2%	5%	9%	15%	8%	2%	4%
2. Training	39%	37%	41%	32%	4%	2%	11%	15%	1%	2%	5%	13%
3. Job sharing and job rotation	38%	69%	5%	31%	28%	0%	1%	1%	28%	0%	0%	0%
4. Employment incentives	58%	60%	13%	16%	5%	3%	20%	16%	2%	4%	1%	1%
5. Supported employment, rehabilitation	43%	55%	26%	6%	25%	27%	1%	2%	1%	6%	3%	4%
6. Direct job creation	46%	39%	32%	26%	0%	20%	15%	3%	3%	5%	4%	7%
7. Start-up incentives	51%	39%	36%	45%	0%	0%	7%	11%	3%	4%	3%	2%
8. Out-of-work income support	36%	28%	57%	60%	0%	1%	0%	0%	7%	12%	0%	0%
9. Early retirement	48%	47%	52%	50%	0%	0%	0%	0%	0%	0%	0%	3%
10. Mixed	39%	78%	23%	10%	21%	10%	12%	0%	4%	2%	0%	0%

Source: Eurostat LMP database, own calculations. The shares of funding of passive measures in Figure 3.2 are the average of out-of-work income support, early retirement and mixed measures. The impact of expenditures in the new Member States is small; in 2008 the shares of origins for the EU-15 and EU-27 are the same.

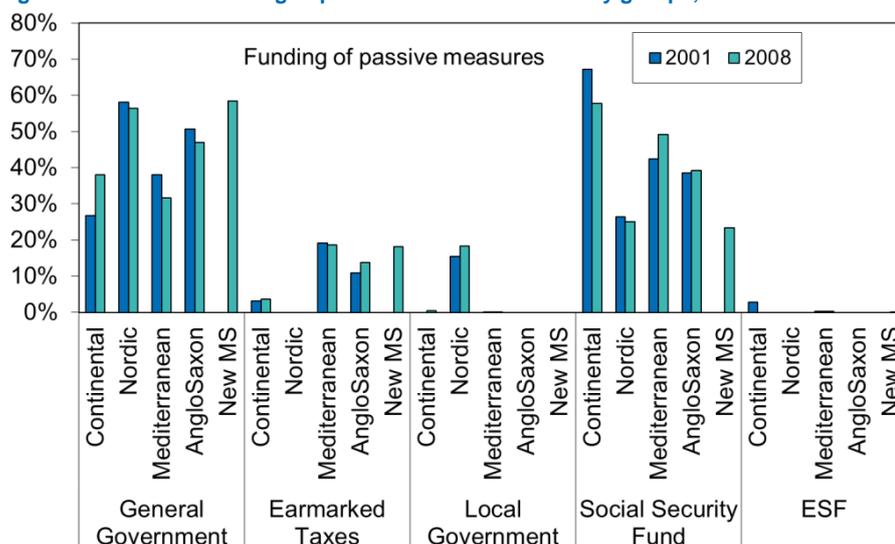
Differences by countries

The origin of funding does not only differ between passive and active measures, but also between different groups of countries. Figure 3.4 shows that the role of social security funds is strongest in the Continental countries. This has a historical background in the decades before and after 1900,

when employer organizations and trade unions developed local and industrial unemployment insurance systems. The managing body of the unemployment insurance determined the bargaining power in wage negotiations.⁵⁶ If the trade unions would manage the fund, they could block companies from recruiting unemployed workers, whereas if companies would manage the fund, they could require unemployed workers to work for them for lower wages on penalty of losing the benefit. The lower share of social security funds in the Nordic countries is explained by the fact that in Denmark, Finland and Sweden a wage-related benefit is insured on a voluntary basis with the government providing a minimum unemployment benefit.

In the Continental countries the central government mainly funds social assistance whereas in most other countries the central government also assumes responsibility for funding a part of the unemployment benefits. Between 10 and 20 per cent of taxes is earmarked in the Mediterranean, Anglo-Saxon and new Member States groups, and in Denmark and Finland, part of the social assistance is funded by municipalities.

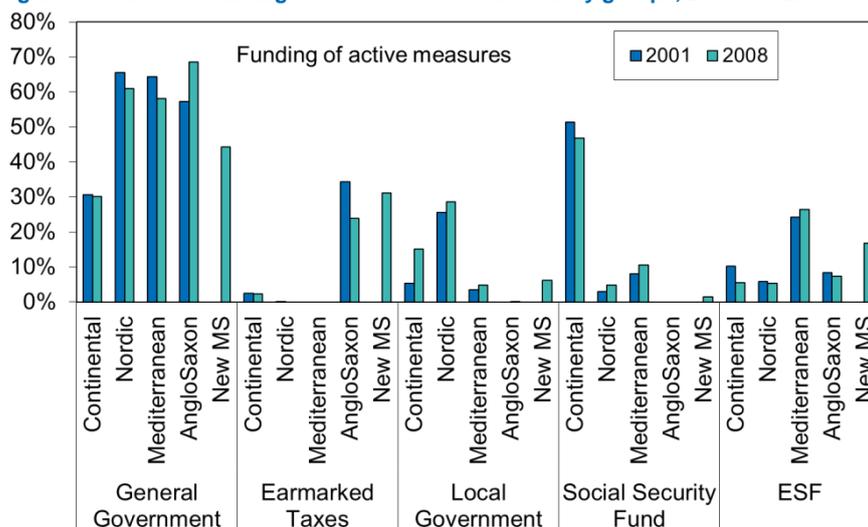
Figure 3.4 Shares of funding of passive measures in country groups, 2001 and 2008



Active measures are only funded by social security funds in the Continental countries. In the other countries roughly 60 per cent of the active measures are funded through general taxes, and an additional roughly 30 per cent are funded out of earmarked taxes in the Anglo-Saxon and new Member States groups. Thus, in the Anglo-Saxon and new Member States groups active measures are virtually fully funded by the central government alone. In the Nordic countries, local governments fund active measures for social assistance recipients.

⁵⁶ Sol, E. (2000), *Arbeidsvoorzieningsbeleid in Nederland (Public Employment Services in the Netherlands)*, Sdu: The Hague.

Figure 3.5 Shares of funding of active measures in country groups, 2001 and 2008



The breakdown of funding per country in Annex 3 shows the differences between individual countries, the most notable being:

- 95% of all funding in Germany originates from social security funds in 2001; however, the Hartz reforms between 2002 and 2004 made social security more sober, integrated active and passive elements into new measures and reallocated funds to the central government;
- Nearly 60% of all funding in Portugal originates from social security funds and 30% from ESF;
- Luxembourg has a high share of earmarked taxes (44%).

Funding of early retirement

In most Member States early retirement is funded from the same origins as out-of-work income support. In two countries, however, the State fully funds early retirement, namely Ireland and Poland. In Belgium the central government funds close to 50 per cent of the early retirement benefits, whilst the social security fund bears the lion's share in the funding of out-of-work income support, as it does in other Continental countries. In the Netherlands, early retirement is funded and managed exclusively by the social partners through completely separate early pension funds.

Whether the similar origins of funding of out-of-work income support and early retirement could cause shortage of funds in times of high unemployment depends on whether the contribution rates suffice. However, an advantage of the Dutch system could be that funds for unemployment benefits are not endangered by increasing expenditures on early retirement benefits, for which the funds are also monitored by the national central bank.

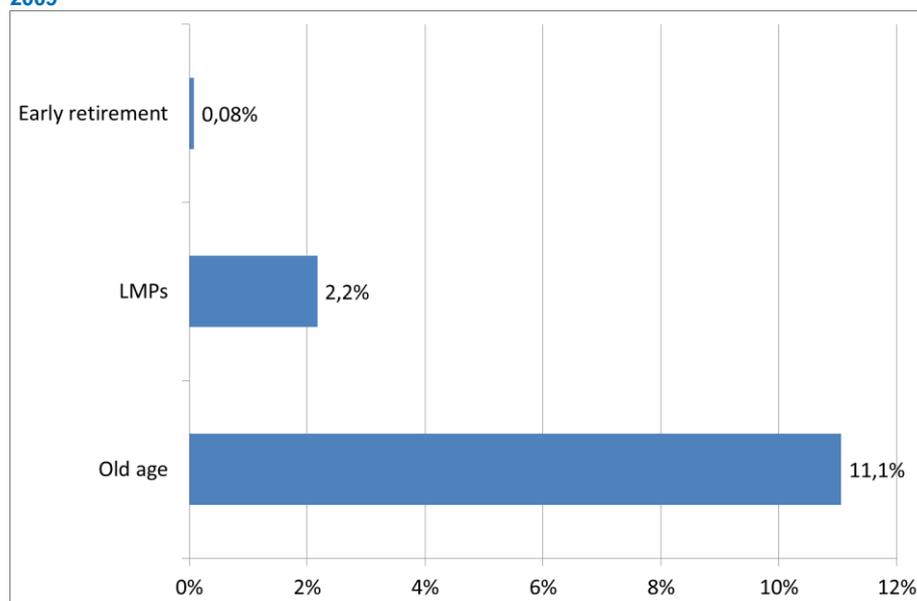
In the face of reforms of early retirement, it is hard to tell how an increasing burden of early retirement in an ageing labour force is shared between older and younger workers. There are virtually no plans to increase contribution rates for early retirement in the EU. However, there is no evidence that early retirement entitlements are fixed at the expense of out-of-work income support. Almost all EU countries have reformed early retirement arrangements in the past years or plan to do so in the near future, as we will discuss further in Chapter 5. Thus the burden of increasing early retirement expenditures in an ageing labour force seems to be shared by both older and younger workers, in the forms of less generous early retirement and constant contribution rates.⁵⁷

⁵⁷ Although some countries such as France and Spain have exempted employers from social security contributions as a crisis measure to stimulate employment.

As Chapter 2 has shown, the long term trend of expenditures on early retirement is declining, without making more use of alternative routes to early retirement such as unemployment or disability, despite the fact that the labour force is already ageing. It must be said that in the crisis of 2009 expenditures on early retirement increased against the long term trend. However this increase is marginal compared to the increase of expenditures on out-of-work income support, as shown by the shares of the various measures in Table 2.1 and therefore not likely a sign of trend reversion.

Nevertheless, expenditures on old age pensions rather than early retirement are the real financial risk of an ageing society. Figure 3.6 shows that across the EU less than 0.1 per cent of GDP was spent on early retirement benefits in 2009, and 11 per cent on old age. Reforms of early retirement could very well be only the first and necessary step to make old age pensions sustainable in an ageing society.

Figure 3.6 Percentage of GDP spent on early retirement, total labour market policies and old age, EU27, 2009



Source: Eurostat LMP and ESSPROS database, own calculations.

Conclusions

To conclude, the funding of passive measures is a mixed responsibility of social security funds and the central government. Among the passive measures, early retirement and out-of-work income support generally have the same origins. The trend in the past two decades is one of decreasing expenditures on early retirement, without increases in alternative routes such as unemployment and disability as concluded in the previous chapter (see also Figure 2.5). So it seems that the burden of an ageing labour force on early retirement is borne by older and younger workers alike.

Active measures are almost fully funded by the central government through general or earmarked taxes in the Anglo-Saxon and the new Member States groups. But also in other countries the central government plays a larger role in funding active measures than in funding passive measures. Only in Continental countries do social security funds play a key role in funding active measures. At first glance it might seem that the continuation of active policies when budgets are low is best guaranteed in countries where social security funds have accumulated sufficient reserves. However, in practice, the origin of funding makes little difference because policy views and the general soundness of the government debt are also important factors, as we argue in the next section.

3.4 Impacts of funding through funds and general taxes

To discuss the best way to fund active and passive measures, it is useful to understand the underlying management of funds of social security funds. At first glance, social security funds build up reserves in times of low unemployment. In times of high unemployment the reserved funds are capitalized and used to finance the increasing expenditures on labour market policies. With general taxation, tax revenues decline in times of high unemployment, and the central government needs to set priorities for all expenditures and could possibly give higher priority to other policies.

Origins of funding and the availability of funds in times of crisis

In practice, there is not much difference between funding through general taxes and through social security. First of all, a large share of expenditures is generated through taxes or contributions paid in the current year: fully in times of low unemployment but still substantially in times of high unemployment.

But more importantly, a government with a sound fiscal policy is able to borrow funds on the market in times of crisis, when share prices drop and investors tend to prefer safe investments. So a central government is not necessarily unable to make the funds available in times of crisis. On the other hand, social security funds are not necessarily able to capitalize all reserved funds in times of crisis. For example, if the fund had invested in shares, those shares have to be sold when unemployment is high – exactly when shares sell low.

To illustrate that there is no guarantee that social security funds can fully capitalize the reserved funds, we can first mention that the actual investment in many countries is contracted out to private financial companies according to a study by Bingwen (2008).⁵⁸ This can work well if investments are adequately regulated and/or monitored. For example, in Denmark there are a few large funds and a substantial part is invested in a worldwide portfolio with good financial results. In Sweden, on the other hand, there are 785 decentralized funds for voluntary social security insurance, some of which are under private management.⁵⁹ Recent developments have led to concerns about the supervision of management and the risk of deficit accumulation in Sweden.⁶⁰

The ability of social security funds to capitalize reserved funds in times of high unemployment depends on the investment policy. Although investment policies have changed in some countries, most notably in Denmark and Sweden, social security funds typically invest heavily or solely in state government bonds. In this situation, social security funds need to sell the bonds in times of high unemployment – the same time in which the central government issues more bonds because of lower tax revenues. This argument is not to promote investment in a worldwide portfolio rather than in bonds of the home country, since investing in the home country could generate economic growth in the home country rather than abroad. The point of this argument is that social security fund reserves do not relieve the central government's general funding problem as it has to compete with the bonds sold by the social security funds.

⁵⁸ Zheng Bingwen (2008), Social Security Fund Governance and Legislation: What China Can Learn From European Union? Conference Paper Presented at the Third High Level Round Table of the EU-China Social Security Reform Cooperation Project, September 23-25, Beijing China.

⁵⁹ Swedish Social Insurance Board (2007), Orange Report: An Annual Report of the Swedish Pension System 2007.

⁶⁰ Resolution CM/ResCSS(2011)16 on the application of the European Code of Social Security and its Protocol by Sweden (period from 1 July 2009 to 30 June 2010).

Targeting funds at labour market policies in times of crisis

The main impact of funding by general taxation or social security funds is therefore not the pressure on the general government budget, but rather that the social security funds will use the money capitalized by selling bonds exclusively for labour market policies, at least in theory.

Again, the practice is more diffuse. Even if labour market policies are implemented by social security funds, the government in most countries is responsible for regulating passive measures. This hybrid responsibility of social security funds and central government is a historical heritage. In the decades before and after 1900, social partners developed funds locally and by sector. Later, most central governments adopted this system and provided universal rules. The result in these countries was a “Bismarckian” system of decentralized industrial funds managed by a council consisting of representatives of trade unions, employer organizations and the central government. Each decentralized council decides how to invest funds, and is required to report deficits to the Central Government, which will then assist with the solution. This is the situation in most European countries, including France, Germany and Spain amongst the large countries, according to the study of Bingwen (2008). In countries with a “Bismarckian” system, the government can in theory change the regulation in times of crisis.

In other countries the involvement of the government is even more direct. The UK, Ireland, the United States and other Anglo-Saxon countries outside Europe adopted a system based on the teachings of Beveridge. Beveridge contended that the State should provide universal benefits to the entire population, expanding public expenditures in times of crisis in a Keynesian manner. The social security fund in those countries is managed by a Trust Fund which invests in a certain kind of government bond, designed to pay out benefits as needed. To quote the wiki on the US Social Security Trust Fund: *“Most of the fund is considered float and can be invested in securities issued by the federal government. These securities can be redeemed as needed to make benefit payments in the future when contributions derived from payroll taxes and self-employment contributions no longer are sufficient to fully fund the then-current benefit payments.”*⁶¹ So the government is responsible for making funds available in times of high unemployment. In this system, according to Bingwen, *“the social insurance fund is included in the framework of fiscal management and fiscal budget and is even taken as the ‘second budget’”*.

Scandinavian countries have adopted a mixed system. These countries have a voluntary wage-related unemployment insurance which is managed in a “Bismarckian” way by decentralized social partners. These countries also have a compulsory flat-rate unemployment benefit (Sweden, Finland) or a relatively high social assistance benefit (Denmark) managed in a “Beveridge” way by the State for those not covered by the voluntary insurance. The management of the voluntary benefits in these countries is tripartite, although the schemes ensure a decisive vote of the government in case of disagreement, according to the Bingwen study.

Thus the regulation of social labour market policies is ultimately the responsibility of the government, with the largest influence of the social partners in the Nordic countries with the voluntary unemployment benefits in the Scandinavian countries and early retirement benefits in the Netherlands. The central government sets the targets, and could change the regulations in times of crisis, for example with regard to the contribution rates.

⁶¹ Wiki on Social Security Trust Fund, downloaded September 2011.

Ultimate responsibility of the central government

So in most of Europe the central government is ultimately responsible for the funding of all labour market policies, including passive policies, in times of high unemployment. In the Continental countries, Spain and Portugal the government has a decisive role through their representatives in the management of the social security fund, through general regulations and intervention in the event of budget deficits of a local/industrial social security fund. In the Nordic countries all unemployment benefits (the Netherlands), the compulsory minimum unemployment benefit (Finland and Sweden) or the general social assistance (Denmark) is financed by the government. The ultimate responsibility of the central government also applies to the other countries:

- In Italy unemployment benefits are funded from a mix of general and earmarked taxes;
- In Greece the level of unemployment benefits is conditional on the availability of funds;
- In Ireland unemployment benefits are funded from earmarked taxes;
- In most new Member States, the government funds unemployment benefits through earmarked taxes (Lithuania, Poland and Slovenia) or general taxes (Czech Republic, Hungary and Malta). Slovakia placed the social security fund under direct control of the ministry in 2005.

The ultimate responsibility of the central government is also reflected in the fiscal rules. Most EU countries have fiscal rules limiting fiscal policy,⁶² Hungary being the exception. All others either have an expenditure, revenue, budget balance or debt rule. Expenditures on labour market policies can be limited by fiscal rules in one country and less so in other countries. For example among the Nordic countries, cyclical expenditures by the government among which active labour market policies, compulsory unemployment benefits and other compulsory social security are included in the expenditure rule of Denmark, Sweden and the Netherlands. In the Netherlands and Sweden expenditures have “hard” caps, whereas in Denmark expenditures are “less hard” targets. In Finland, the expenditure rule is exclusive of cyclical expenditures such as social security and interest payments⁶³. This means that among the Nordic countries, fiscal rules place the strictest limits on labour market policy expenditures in the Netherlands and Sweden, less in Denmark and least in Finland.

Fiscal rules generally include labour market policies in Continental and Anglo-Saxon countries as well. In none of the Mediterranean countries do the fiscal rules include social security and labour market measures funded by the social security funds; however they apply to labour market measures funded by all governments (national, regional and local) in Italy and only those funded by the central government in Spain. Whether labour market policies are included in the fiscal rules differs between countries in the new Member States. For example, in the Czech Republic all measures are funded through the Central Budget and are covered by an expenditure rule. In Slovakia, passive measures are fully funded through the Social Security Institute and do not fall under the expenditure rule.

Primary importance of funding

As we have argued, the main impact of funding through social security funds instead of the central government is not the availability of funds in times of crisis, but rather a smaller risk that social security funds are used to finance other policies instead of labour market policy. This does not necessarily mean that when budgets are low, continuation of active policies is better guaranteed when financed by social security funds as is the case in Continental countries. On the contrary, the strongest expansions of active policies in 2009 are seen in the new Member States Hungary, Poland and Slovenia, where not only active but also passive measures are primarily funded out of general taxes. It seems that policy views are more important for the continuation or expansion of

⁶² OECD database.

⁶³ Ljungman, G. (2008), Expenditure Ceilings – A Survey, IMF working paper 08/282, December 2008.

active policies than the origin of funding or even the level of the government debt, which is high in Hungary.

The origin of funding, therefore, does not seem to be the primary importance of funding. Arguably more important for the sustainability of funding is that the contribution or tax rates suffice to cover future needs. Contributions can be invested in government bonds of the home country and taxes can be used to reduce government debts. In both cases the government needs to borrow additional money on the capital markets when unemployment increases, either because the government bonds of the social security funds are capitalized or because the tax revenues are low.

Setting sufficiently high tax or contribution rates requires realistic planning, taking into account the ageing of the workforce for early retirement and also for the old age pensions, taking into account the risk of high unemployment, and making realistic forecasts for economic growth. Accumulating reserves for times of high unemployment is even important if access to benefits is strict in times of low unemployment, since countries with strict access tend to be more prone to expand eligibility in times of high unemployment.

More in general, the ability to make funds available in times of high unemployment is more important than the way funds are collected. When reserved funds are depleted or the government is unable to borrow, it is too late to raise contribution or tax rates, since expenditures will rise faster than revenues. If no funds are available, little else seems to be left than to cut budgets, either of labour market policies or of other policies.

3.5 Responsible institutes

3.5.1 *Responsible institutes at the EU-level*

To understand how active and passive measures are delivered, and whether funding and implementation are aligned, we have analysed which institutes are responsible for the implementation of the measures, in relation to the magnitude of the expenditures on the measures for which they are responsible. In addition to the tables in the Annex 3, Table 3.2 provides an overview of the sharing of responsibility between the various institutes based on the budget per measure in each category.

In many countries the social security institute is responsible for passive measures as well as employment incentives. In those countries, the funding and implementation of passive measures are in the same hands. It is logical that if there is an active measure for which the social security fund is responsible, it tends to be employment incentives. If the level of the employment incentives depends on the remaining benefit entitlements and employers are automatically entitled to the incentives for recruiting from target groups, a social security institute that funds and is responsible for passive measures is in a natural position to implement employment incentives as well. Training however tends to be the responsibility of the public employment services (Table 3.2) even if it is funded by the social security institute (Table 3.1). A logical explanation for this is that public employment services should know for which occupations vacancies are hard to fill. Those are the occupations for which training could be most effective.

Table 3.2 Share of responsible institutes weighted by expenditure per category (row percentages per year)

Category	Public employment services		Social security institute		Central government		Regional government		Local government		Trade unions	
	2001 EU-15	2008 EU-27	2001 EU-15	2008 EU-27	2001 EU-15	2008 EU-27	2001 EU-15	2008 EU-27	2001 EU-15	2008 EU-27	2001 EU-15	2008 EU-27
1. Labour market services	57	64	13	8	25	20	1	2	4	6	0	0
2. Training	51	46	10	12	24	21	6	14	9	7	0	1
3. Job sharing and job rotation	56	83	2	16	42	1	0	0	0	0	0	0
4. Employment incentives	43	44	25	24	23	22	4	6	6	4	0	0
5. Supported employment and rehabilitation	40	20	1	5	23	28	3	7	32	40	0	0
6. Direct job creation	29	34	3	3	39	6	6	16	23	42	0	0
7. Start-up incentives	55	69	11	0	29	24	5	7	0	0	0	0
8. Out-of-work income support	57	47	25	36	11	13	2	1	1	1	4	2
9. Early retirement	30	34	35	34	27	22	1	1	0	0	8	9
10. Mixed	20	44	17	5	20	2	8	0	33	49	2	0

Source: Eurostat LMP database, own calculations. The shares of funding of passive measures in Figure 3.8 are the average of out-of-work income support, early retirement and mixed measures. The impact of expenditures in the new Member States is small; in 2008 the shares of institutions for the EU-15 and EU-27 are the same.

Although in many countries funding and implementation of passive measures and employment incentives are in the same hands of the social security institute, at the EU-level, the public employment services are responsible for implementing most measures, whether active or passive. This is especially true in new Member States and Luxembourg, and also in Germany before the last Hartz reform of 2004. This means that funding and responsibility for the implementation are often in different hands. This could be because social security institutes are responsible for paying benefits but employment services have the knowledge to match supply and demand on the labour market, and also to monitor job search. Another reason could be that social security institutes focus only on (unemployment) beneficiaries, whilst employment services offer their services to non-beneficiaries as well. This could resolve a disincentive of the social security fund to start a programme for unemployment with a short maximum benefit duration of, say, six months, leaving activation programmes to the municipality after the unemployment benefit has expired. On the other hand, public employment services are not financially responsible for the payment of benefits and might not fully take cost-efficiency into account. The next chapter discusses the impact of a rigorous

reform in the Netherlands shifting responsibilities for activation from the public employment services to social security funds and municipalities.

Each of the institutes could in turn outsource services to private parties. It can be deduced from the LMP database for Ireland and effectiveness studies for the UK (see next chapter) that outsourcing services to third parties is common in the Anglo-Saxon countries, with close to 50 per cent contracted out in Ireland. In the Netherlands, minimum percentages of labour market policies that need to be contracted out have been in place in the recent past, with increasing percentages between 1997 and 2006. As from 2007, Dutch public employment services and municipalities could choose whether to provide services in-house or not. In 2007 and 2008, around 80 per cent of the labour market policies were contracted out.⁶⁴ Not much information is available in most countries on contracting out services, but less seems to be outsourced than in the Anglo-Saxon countries and the regulation between 1997 and 2007 in the Netherlands was unique. The effects of contracting out services in the Netherlands are also discussed in the section on labour market services in the next chapter.

In many countries one institute is responsible for all labour market measures within the category. The exception is Germany, where mixed policies of active and passive elements are the shared responsibility of the public employment services and the local governments. This is explained by the responsibility of local governments for social assistance, which comes with strong requirements to accept jobs and is therefore classified as a labour market policy in Germany. The local governments receive a budget with incentives to use budgets partly for active policies to save on benefits. So the local governments can use the budget for a mix of passive and active policies at their discretion. Municipalities in Denmark play an important part in the provision of social assistance and active measures for this group, and municipalities in the Netherlands even have the sole responsibility for both.

Local governments also have a big responsibility for implementing supported employment and rehabilitation, and for direct job creation. These programmes partly have strong social rationales as discussed in Chapter 1. These programmes serve to keep long-term unemployed or disabled workers employed, in the hope that they will eventually find a regular job. As for mixed measures, the central government is the largest funder of these measures (Table 3.1) even though the local governments are the largest implementer (Table 3.2). However, if the costs of direct jobs and supported employment are borne by the central government, local governments might “park” the difficult-to-place target groups of these measures in the programmes in order to save expenses on local welfare arrangements. This is quite different from the mixed measures as discussed previously, which seek to incentivize effective active policies.

The central government played an important part in implementing all types of measures in 2001, but withdrew between 2001 and 2008 with respect to job sharing, job rotation, direct job creation and mixed measures, largely due to the discontinuation of programmes.

The central government played an important role in the implementation of all types of measures in 2001, but has retreated between 2001 and 2008 in the fields of job sharing and job rotation and direct job creation and mixed measures, largely due to the discontinuation of programs.

⁶⁴ Koning, P., Contracting Welfare to Work Services: Use and Usefulness, CPB Discussion Paper, no. 135, 2009.

The regional governments play a limited but growing part in the implementation of training and of direct job creation. Particularly in France, regional governments have been made increasingly more responsible for training. Before 2005, regions in France organized vocational courses for adult workers only, but starting in 2005 the central government delegated vocational courses for young people to regions as well, whilst the French government focused on training allowances and subsidies. The UK cut budgets for training in 2005 and made regions responsible for the implementation just like in France, but there was never a large role for training in the UK. The reason for delegating direct job creation to regional governments is simply that central governments, especially of Nordic countries, ceased providing direct job creation programmes.

Trade unions are responsible for certain measures only in a few countries, such as out-of-work income support in Sweden and early retirement in various countries.

Early retirement is equally likely to be implemented by public employment services, the social security institute or the central government. As discussed in the previous section, however, the central government provides the regulations. Even in the Netherlands where the social partners exclusively run early retirement schemes, the central government confers with the social partners and seeks to steer the schemes in certain directions through, for example, tax treatment of pension savings. The observation that it is mostly the central government that plans reforms of early retirement indicates that responsibility for implementation and for policy formulation are two different things. This is most noticeable for early retirement but seems to apply to other measures as well, depending on the general institutional settings. Before discussing the importance of institutional settings in Section 3.6, we will describe the institutes responsible for the implementation by country group in the next subsection.

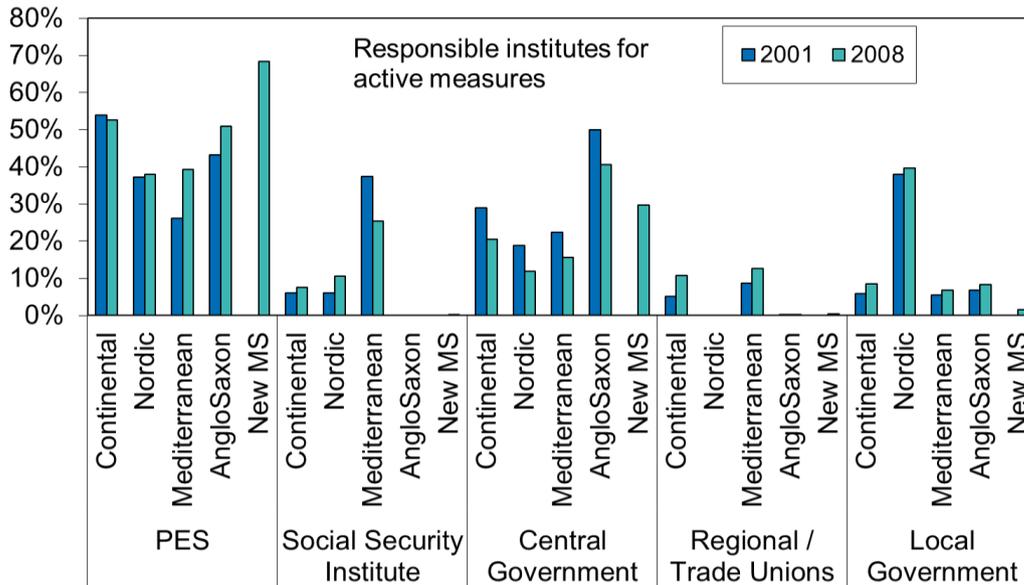
3.5.2 *Responsible institutes at the country group level*

Certain variations are evident amongst the groups of countries defined in Chapter 2 that do not show up in the data presented so far in this section. As Figure 3.7 shows, the public employment services in New Member States play a much larger role in implementing active labour market policies than other groups of countries. The difference between the New Member States and other groups of countries with respect to the management of active labour market measures is because these measures are relatively new to the region and therefore do not have a historical presence amongst all the labour market institutions⁶⁵.

Having said that, there has been a shift, particularly amongst Mediterranean and Anglo-Saxon country groups from central government to public employment services, and to a lesser extent, to regional and local government. Public employment services had a limited role in the Mediterranean countries in 2001, but gained responsibilities from the central government in general and from social security institutes for training in particular. Comparing Figure 3.5 with Figure 3.7 shows that central funding is combined with local implementation mostly in Mediterranean countries, with the risk of “parking” unemployed in programmes as discussed above.

⁶⁵ Benefit systems and active labour market policies in New Member States, Ecorys p141.

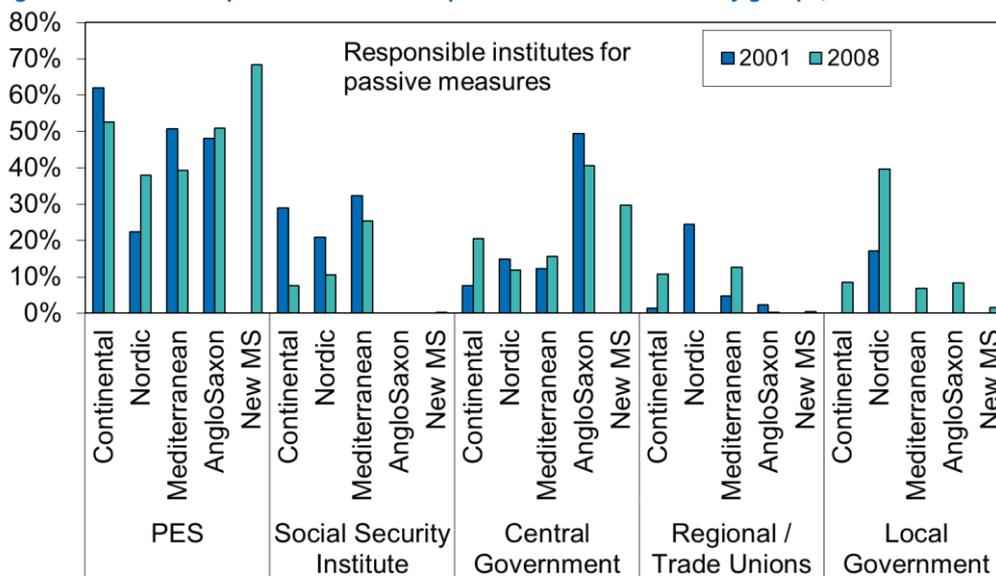
Figure 3.7 Share of responsible institutes of active measures in country groups, 2001 and 2008



On the whole, most responsibility for active labour market measures lies with the PES, followed by the central government. Rather little responsibility is placed with the remaining organizations. However, it is striking to note the division between Nordic and the other groups of countries when it comes to the responsibility of local government, which is nearly as high as that of the PES in Nordic countries. The likely explanation for this difference is the priority in Nordic countries for supported employment and rehabilitation, which is not only funded at significantly higher levels than in other groups of countries (see section 3.3) but also generally managed at the local level as shown by Figure 3.8.

Public employment services hold similarly high levels of responsibility over passive measures as they do over active measures, with the highest share held by new Member States. The role of the central government, is however, slightly smaller for passive measures, with the exception of the Anglo-Saxon countries.

Figure 3.8 Share of responsible institutes of passive measures in country groups, 2001 and 2008



Whereas local governments played a rather insignificant role, if any, in passive measures in 2001, their role had increased by 2008, in particular in the Nordic countries, due to a shift in responsibility for mixed measures. Social Security institutes, on the other hand, have seen a decreasing responsibility across the Continental, Nordic and Mediterranean countries, also due to shifts of responsibility in mixed measures.

3.6 Other institutional factors relevant for funding

As argued in Chapter 2, spending on active measures depends mostly on political insights and spending on passive measures on the business cycle. The amount of funds needed to be diverted to passive measures in times of high unemployment depends on the institutional arrangements. The eligibility, benefit level and maximum duration of benefits determine the magnitude of necessary funds, but the ease with which employers can dismiss personnel affects the influx of workers into unemployment in times of crisis.

Benefit levels and maximum durations of benefits have been analysed extensively in other reports. This section provides a brief overview per country and then discusses the implications of different institutional settings. But first, we will discuss eligibility and the type of benefits to which unemployed are entitled. Table 3.3 contains an overview of the characteristics of unemployment benefit schemes in the EU which are discussed in this section.

Table 3.3 Overview of unemployment benefits schemes

Country	Compulsory	Scheme	Contribution/taxes, covered population	Type of benefit
Continental				
Austria	Compulsory	Insurance	Contributions, employees and assimilated groups	Earnings-related
	General	Assistance	Taxes	Flat-rate after exhaustion of unemployment benefit
Belgium	Compulsory	Insurance	Contributions, employees	Earnings related or lump-sum for young trainees, depending on family situation
France	Compulsory	Insurance	Contributions, employees	Earnings-related
	General	Assistance	Taxes	Flat-rate, means-tested
Germany	Compulsory	Insurance	Contributions, employees	Basic security benefits for jobseekers
	General	Assistance	Taxes	Means-tested minimum resources for job seekers. Dependents in household may claim for Social Benefit
Luxembourg	General	Insurance	Taxes	Earnings-related
Nordic				
Denmark	Voluntary	Insurance	Contrib., active population	Earnings-related
Finland	Voluntary	Insurance	Contrib. and taxes, employees self-employed	Earnings-related
	Compulsory	Insurance	Taxes, contrib. employees not voluntary insured	Basic allowances

Country	Compulsory	Scheme	Contribution/taxes, covered population	Type of benefit
	General	Assistance	Taxes	Assistance for jobseekers without work experience or after exhaustion of unemployment benefits
Netherlands	Compulsory	Insurance	Contributions, employees	Earnings-related; flat rate if not meeting eligibility criteria
Sweden	Voluntary	Insurance	Contributions, active population	Earnings-related
	Compulsory	Insurance	Employers contrib., if not employee voluntarily insured	Flat-rate
Mediterranean				
Greece	Compulsory	Insurance	Contributions, employees	Earnings-related
Spain	Compulsory	Insurance	Contributions, employees	Earnings-related
	General	Assistance	Administered by autonomous regions	Flat rate
Italy	Compulsory	Insurance	Employers' contrib., employees	Earnings-related
Portugal	Compulsory	Insurance	Contributions, employees	Earnings-related
	General	Assistance	Contrib. and taxes, employees	Flat-rate, means-tested
Anglo-Saxon				
Ireland	Compulsory	Insurance	Contributions, employees	Flat-rate
	General	Assistance	Taxes	Flat-rate
UK	Compulsory	Insurance	Contributions, employees, some self-employed	Flat-rate
	General	Assistance	Taxes	Flat-rate, means-tested
New Member States				
Bulgaria	Compulsory	Insurance	Contributions, employees	Earnings-related
Cyprus	Compulsory	Insurance	Contributions, employees	Earnings-related
	Voluntary	Insurance	Cypriots working abroad	
Czech Rep.	Compulsory	Insurance	Contributions, active population	Earnings-related
Estonia	Compulsory	Insurance	Contributions, employees	Earnings-related
	General	Assistance	Taxes on active population	Flat-rate
Hungary	Compulsory	Insurance	Contributions, employees, self-employed	Earnings-related
Lithuania	Compulsory	Insurance	Contributions, employees	Earnings-related
Latvia	Compulsory	Insurance	Contributions and taxes	Earnings-related
Malta	General	Insurance	Taxes	Flat-rate
Poland	Compulsory	Insurance	Employers' contrib., employees	Flat-rate
Romania	Compulsory	Insurance	Contributions, employees and assimilated groups	Earnings-related
	Voluntary	Insurance	Contributions, self-employed, employees working abroad	Flat-rate
Slovenia	Compulsory	Insurance	Taxes and contrib., employees	Earnings-related
Slovakia	Compulsory	Insurance	Contributions, employees	Earnings-related
	Voluntary	Insurance	Contrib., residents under age 16	Earnings-related

Source: MISSOC 2008.

Compulsory unemployment insurance

In nearly all EU countries compulsory contributions to the insurance scheme are collected through a combination of mandatory employer and employee contributions, although in Italy and Poland only employers contribute to the scheme. There are, however, a few exceptions, namely:

- There is no compulsory scheme in Denmark;
- In Luxembourg and Malta benefits are financed out of general taxes.

In most countries compulsory schemes cover employees and assimilated groups only, but in a few countries self-employed are also covered. When an individual becomes unemployed, nearly all EU countries provide an earnings-related benefit. Only Ireland, Malta, Poland, and the UK provide flat-rate benefits only.

Voluntary unemployment insurance

In a few countries, employees have the option of participating in an insurance scheme providing earnings-related benefits. If they opt not to participate, they will only receive flat rate compensation if they become unemployed. Of the Nordic countries, Finland, Sweden and Denmark have these systems in place. The option to pay voluntary contributions is rather exceptional in the Netherlands and applies, for example, to holiday jobs for students.

Under these schemes, the allowances provided to those not voluntarily insured come from various sources:

- Finland Employees who do not participate in the voluntary scheme and taxes;
- Sweden Employers;
- Denmark Active population.

In these cases, flat rate allowances apply in Finland and Sweden. Denmark is the only one to provide voluntary schemes with no alternative options for the uninsured.

Unemployment assistance

Roughly half of the EU countries have additional unemployment assistance schemes that provide flat-rate allowances to those who do not meet the work history criteria or after exhaustion of the unemployment benefit. These countries are Finland, Sweden, the Netherlands (Nordic), Austria, Belgium (young trainees), France, Germany (Continental), the UK and Ireland (Anglo-Saxon), Spain, Portugal (Mediterranean) and Estonia and Slovenia. The unemployment assistance is paid through taxes in most countries, but through social security contributions in Belgium, Finland, the Netherlands and Sweden. Although as a general rule the unemployment assistance is not means-tested, it is means-tested in France, Germany, Portugal and the UK.

Replacement rates and maximum durations of unemployment benefits

The necessary funding also depends on the generosity of the benefits, determined by the benefit levels and maximum duration of the benefit. See Table 3.4. As shown in Chapter 1, the generosity of the social security system also depends on benefits for the disabled, social assistance and family and housing allowances. Also, the Euro has a larger purchasing power in new Member States than in the old Member States. We therefore indicate the unemployment benefit level inclusive family and housing allowances according to the OECD database. The maximum benefit duration is the maximum duration of the unemployment benefit. Subsequent unemployment assistance or social assistance is typically unlimited as long as the entitlement criteria are met.

Table 3.4 Overview of replacement rates (in percentage of the previous wage) and maximum durations of unemployment benefits

Country	Replacement rate, married couple with non-working spouse	Maximum duration in months	Comments on maximum duration
Continental			
Austria	61	5-12	Depends on insurance period
Belgium	50	No limit	Strict job search requirement
France	56	4-36	Depends on insurance period and age
Germany	65	6-15	Depends on insurance period and age
Luxembourg	72	12-24	Depends on age, insurance period, difficulty to place
Nordic			
Denmark	65	24	Within a 3 year period
Finland	77	16	Until retirement if benefits not exhausted at age 60
Netherlands	71	3-38	Depends on employment period
Sweden	68	14	21 months if having a child under age 18
Mediterranean			
Greece	60	5-12	Depends on employment period
Italy	31	8, 12, 36 or 3+	Ordinary benefit, benefit at age 50+, mobility list, or special with extension in recession
Portugal	50	9-41	Depends on insurance period and age
Spain	40	4-24	Depends on insurance period
Anglo-Saxon			
Ireland	80	11-14	Depends on insurance period
UK	71	6	For any job seeking period
New Member States			
Bulgaria	41	4-12	Depends on insurance period
Cyprus	--	5	--
Czech Rep.	59	5-11	5 months till age 50
Estonia	39	6-12	Depends on insurance period
Hungary	55	0-12	Depends on insurance period
Latvia	53	9	--
Lithuania	81	6-11	Depends on insurance period, age and regional unemployment rate
Malta	58	0-7	Depends on insurance period
Poland	43	6-12	Depends on insurance period, age and regional unemployment rate
Romania	41	6-12	Depends on insurance period
Slovenia	74	3-25	Depends on insurance period and age
Slovakia	45	4-6	Depends on previous temporary or permanent employment contract

Source: OECD 2009 (replacement rate): unemployment benefit/assistance + family and housing allowance, minus taxes, as a percentage of previous net wage + family/housing allowances.

MISSOC July 2011 (maximum unemployment benefit duration, converted into calendar months).

As can be seen from Table 3.4 the highest replacement rates can be found in the Nordic, Continental and Anglo-Saxon Member States. Replacement rates are also high in Lithuania and Slovenia. The longest benefit durations are also found in the Nordic, Continental and Mediterranean countries. This means that benefits are high in the Anglo-Saxon countries but for shorter durations,

and mainly due to family and housing allowances. Unemployment benefits are ungenerous in most new Member States, and also in Italy and Spain.

The maximum duration tends to be longer for those who have been insured for a long time and for older unemployed.

3.7 Funding in different institutional settings

The previous sections discussed funding, responsible institutes and other institutional factors relevant for funding. The impacts of funding were discussed for three types of social security systems. Is there one system in which funding appears to have worked best given recent experiences?

Bismarckian system

To sum up, the majority of EU-27 countries have a compulsory unemployment insurance benefit system with earnings-related benefits. This is typically the case in Continental and Mediterranean countries, countries with a “Bismarckian” system of local and industrial social security funds run by tripartite managements. Also the neighbouring countries Hungary, Slovenia, Czech Republic, Slovakia as well as the Netherlands have compulsory insurance for earnings-related benefits.

Before the crisis starting in 2008, government deficits in the Continental countries, the Netherlands, Slovenia and the Czech Republic were smaller than the EMU norm of 3 per cent of GDP. Also, the Continental countries implemented major reforms to reduce expenditures on labour market policies. So it appears possible to implement reforms and manage funding well in a Bismarckian system.

On the other hand, Hungary, Slovakia and the Mediterranean countries with the exception of Spain already had a history of larger government deficits prior to 2008. Also, there is no evidence of a decline of expenditures or major reforms in Hungary and the Mediterranean countries, despite a government debt exceeding 60 per cent of GDP prior to 2008. At the country group level, expenditures on labour market policies in the Mediterranean countries rose by 1.0 per cent of GDP in 2009 as compared to 2007, whereas in each of the other four country groups expenditures on labour market policies rose by 0.4 per cent of GDP. Nevertheless despite increasing social security expenditures Spain exempted employers under certain conditions from social security contributions in 2009.⁶⁶ In 2010, social security ran a deficit for the first time since 2001, of 0.24 per cent of GDP.⁶⁷ Thus the adoption of social security regulations by the central government can also have risks for the sustainability of social security.

There are many factors that could possibly explain the outcomes of different countries with a Bismarckian system such as the competitiveness of a country, labour market rigidities or informal work and tax evasion. But a policy factor that could explain the ability to implement reforms to cut the general budget, could be the degree of discretionary power of the central government with regard to the general budget, which is high in the Mediterranean countries and Hungary, whilst policies have been more limited by fiscal rules in the Continental countries.

⁶⁶ Council of Europe, Resolution CM/ResCSS(2011)15 on the application of the European Code of Social Security by Spain (Period from 1 July 2009 to 30 June 2010).

⁶⁷ Godino, A. and O. Molina (2011), Failed Remedies and Implications of the Economic Crisis in Spain, European Social Observatory research paper, no.6.

Beveridge system

Flat-rate benefits are offered as the sole out-of-work income support in the Anglo-Saxon countries and some new Member States. As we have seen before, those are exactly the countries where the government almost fully funds social security in accordance with the “Beveridge” system.

In the UK expenditures on labour market policies rose comparatively little at the start of the latest crisis by only 0.2 per cent of GDP between 2007 and 2009 as compared to 0.4 per cent in most other countries. Nevertheless, government deficits dropped to roughly 10 per cent negative in 2009 and 2010. In Ireland the situation was even worse, with deficits falling to more than 30 per cent negative in 2010 in order to save banks. The reason why government budget deficits dropped by relatively large percentages in the Anglo-Saxon and new Member States, might be the ease with which employers can dismiss workers. Severance pay provided by the employer may restrict access to public unemployment assistance in the short run, but after one year at most unemployed workers would still have to apply for unemployment assistance or minimum income support. Since the majority of unemployed are generally low-skilled workers with little assets, most will pass the means-test and be eligible for assistance. Although the UK has short-lasting and ungenerous unemployment benefits, the social system in the UK is much more generous when family and housing allowances and disability benefits are included.

With social security as a full part of the general government budget, lower reserves might be built up for times of high unemployment. This was definitely the case in Ireland where the reserves were depleted in 2010 and the central government had to fund the part of the benefits not covered by the then-current contribution revenues. In principle, countries whose social security falls completely under the general government budget need not have high reserves, as long as the government debt is low and the government can borrow funds on the financial markets. However, government debts were not low in 2010, amounting to 80 per cent of GDP in the UK and close to 100 per cent in Ireland.

The new Member States have low government debts and deficits were between 3 per cent and 10 per cent in 2009 and 2010. The main difference between the Anglo-Saxon countries and the new Member States with regard to the social system seems to be that the new Member States have less generous passive labour market policies and their other social policies such as social assistance, housing and family benefits are less generous as well.

Scandinavian / flexicurity system

In the Nordic countries earnings-related unemployment insurance is a voluntary scheme, although Romania and Cyprus have voluntary schemes for people working abroad. In Finland and Sweden voluntary insurance is backed up by a compulsory scheme providing flat-rate assistance for those not voluntarily insured. In Denmark the only fallback option is its minimum income scheme, which is relatively high. The voluntary wage-related unemployment benefits are not included in the general government budget. This is tenable as long as the social security funds have sufficient reserves, which needs to be supervised. However, at most 50 per cent of the employees opt for voluntary unemployment insurance; the remainder are covered by the compulsory flat-rate basic income insurance.

The replacement rates of 60 per cent to 70 per cent (for breadwinners) in the Scandinavian countries are among the highest in Europe. Scandinavian countries also spend the most on active measures as a percentage of GDP. The expenditures on labour market measures increased by a further 0.6 per cent of GDP in Denmark between 2007 and 2009 and by 0.5 per cent of GDP in Finland. In Sweden, however, expenditures on labour market measures increased by only +0.1 per cent of GDP between 2007 and 2009. This difference might be attributed to the more flexible labour

market in Denmark especially, where employers can dismiss workers easily. Nevertheless, the increase of +0.5-0.6 per cent of GDP is less than in the Mediterranean countries (+1.0%) and also less than in the early 1990s (also about +1.0%). There is no doubt that the reforms in the Scandinavian countries have moderated the flexicurity system.

Not only the generosity and focus on active measures has been reduced in the Scandinavian countries, “automatic stabilizers” are also bound by fiscal rules, strongly in Sweden although less in Denmark and Finland. Automatic stabilizers imply that expenditures on passive measures are allowed to increase in times of high unemployment without monitoring the budget. However, Denmark and Sweden have expenditure rules that include cyclical expenditures such as active labour market policies and the compulsory unemployment benefits and other compulsory social insurance. However, in Denmark expenditures are “less hard” targets contrary to the “hard caps” in Sweden. In Finland, the expenditure rule does not include cyclical expenditures such as social security and interest payments⁶⁸. Furthermore and contrary to Denmark, Finland and Sweden apply a debt rule.

So even in Denmark where the ease of dismissal and the generous benefits and importance of active policies make Denmark the exponent of the flexicurity system, reforms have moderated the labour market policies and there are some, albeit less strict, fiscal rules that bind the “automatic stabilizers”. In addition, any unemployed workers who are truly difficult to place are not offered active policies but only given benefits. This can be deduced from the high expenditures on disability benefits (not a labour market policy) and also the extension of the unemployment benefit up to retirement age for older workers in Finland. Therefore, budget checks on labour market policies and the flexicurity system are not absolute even in Denmark.

Technically, the social security system in Denmark is affordable because the government debt was well below 60 per cent of GDP in 2010 like in the other Scandinavian countries and the Scandinavian countries pay low interest rates on their government bonds. Whether the mix of passive and active measures are cost-efficient when there is less demand for labour requires an analysis of effectiveness of measures, which is discussed in the next chapter.

Also, the remark made by Torben (2011) that “automatic stabilizers” should do their job without monitoring expenditures, needs to be nuanced. If there is no need to monitor expenditures, this is a luxury position that can be attributed to low government debts. If sufficient funds cannot be raised in the short term, monitoring seems necessary to adjust priorities and budgets, including realistic budgeting based on realistic assumptions of GDP growth.

Conclusions

What can we learn from the different institutional settings and the experiences of countries? Firstly, it seems, that reforms of the social system should go beyond the reform of labour market policies. In particular, passive policies are ungenerous in the UK and Italy, but other allowances are generous in the UK and during the latest recession Italy has rapidly expanded the eligibility for unemployment benefits. So countries should not only set contribution rates high enough to cover labour market policies in times of high unemployment, but they should also raise sufficient revenues to cover social assistance or extended eligibility if labour market policies are ungenerous.

⁶⁸ Ljungman, G. (2008), Expenditure Ceilings – A Survey, IMF working paper 08/282, December 2008.

Secondly, in comparing the experiences of Continental and Mediterranean countries, fiscal rules could help anticipate increasing expenditures in times of high unemployment. There are two reasons for central governments to make projections of future labour market policy expenditures as well as other social policy expenditures, namely:

- Even when social security institutes are responsible for the funding and/or implementation of labour market policies, the central government still lays down the regulations and needs to act when reserves of the fund are depleted;
- Labour market policies interact with other social policies, notably social assistance when the unemployment benefit expires.

A third lesson is that the ability to raise sufficient funds is important in order to afford labour market policies in times of high unemployment, either through selling assets of social security funds or through borrowing if government debt is low. In times of high unemployment it is too late to raise contribution or tax rates, as expenditures will rise more rapidly than revenues.

An altogether different question is whether active measures are less cost-efficient when the demand for labour declines. This question will be addressed in the next chapter.

3.8 Conclusions

Institutional arrangements

Funding and implementation arrangements vary in the European Union. The main origins of funding for both active and passive measures are the central government and social security funds, with the central government bearing a larger share for active measures and the social security funds bearing a larger share for passive measures.

The main differences can be related to welfare state regimes and are geographically clustered, and to passive versus active measures. No classification of arrangements would do full justice to the whole range of arrangements between and even within countries and sometimes even for the same measure. Table 3.5 characterizes for various country groups the main arrangements of funding, policy formulation and implementation as far as passive measures are concerned.

Table 3.5 Funding and implementation of passive measures (2008)

Country group	Main funding sources	Main fund management	Policy formulation	Main implementation
Continental	Compulsory contributions Taxes	Social security funds	Central government	PES
Mediterranean	Compulsory contributions	Social security funds, central government	Central government	PES, social security funds
Anglo-Saxon	Compulsory contributions Taxes	Central government	Central government	PES, central government
New Member States	Compulsory contributions	Central government	Central government	PES
Scandinavian	Taxes Voluntary contributions	Central government	Government, tripartite	Local government, PES

For **passive measures**, fund management, policy formulation and implementation are generally in different hands in Continental and Mediterranean countries. In these countries, passive measures are funded through compulsory contributions managed by social security institutes, policy is formulated by the central government and public employment services are largely responsible for

the implementation of passive measures, whilst the central government is largely responsible for the funding and implementation of social assistance.

In Anglo-Saxon Member States and new Member States compulsory contributions are levied as well, but the central government manages the funds and formulates the policies, and the responsibility for implementation is shared between PES and the central government.

Scandinavian countries have a mixed system of voluntary contributions for wage related unemployment benefits, and taxes for basic income insurance for those not voluntarily insured. Funds are managed by government agencies with tripartite management. Depending on the voluntary or basic insurance, either the PES or the local government is primarily responsible for the implementation.

Table 3.6 Funding and implementation of active measures (2008)

Country group	Main funding sources	Main fund management	Policy formulation	Main implementation
Continental	Compulsory contributions Taxes	Social security funds	Central government	PES
Mediterranean	Taxes, ESF	Central government, ESF	Central government	PES, social security funds
Anglo-Saxon	Taxes, earmarked taxes	Central government	Central government	PES, central government
New Member States	Taxes, earmarked taxes	Central government	Central government	PES
Scandinavian	Taxes	Central government	Central government	Local government, PES

For **active measures**, the implementation is roughly the same as for passive measures, and again the central government formulates the policies. However, active measures are funded to a larger extent by the central government through general taxes, and also through earmarked taxes in Anglo-Saxon countries and new Member States.

Funding and implementation of labour market policies are in the same hands in some countries, but in most countries public employment services are responsible for implementation. A rationale for placing both funding and implementation with central government or the social security fund is to improve cost-efficiency and the alignment of active and passive policies. On the other hand, public employment services have the advantage of being informed of registered job vacancies. Also, placing responsibility for the implementation of active measures with the social security fund, as is partly the case in Mediterranean countries, bears the potential risk that no activation is started for the unemployed with short maximum durations.

Secondly, the actor investing in labour market policies should be rewarded for the success. This is not necessarily the case if the social security fund is responsible for delivering active policies. For instance, if an unemployed person has a maximum benefit of one year, the social security fund would bear the cost of an active policy during the first year, but the government that delivers social assistance would reap the rewards if the worker finds a job in the second year, after his benefit entitlement has expired. Therefore, aligning the interests of the social security fund and the government providing social assistance is even more important when the maximum benefit duration is reduced, since the shorter the benefit duration is, the less the saved benefits are for the social security fund. This alignment is not achieved by making active policies compulsory (“Comprehensive Approach”) since this will delay enrolment into active policies. Instead, a better

way to align incentives for active policies is to reward the provider of the active policy with a fixed bonus for every participant who finds a job within one year after completion of the active measure.

A particular risk of poorly aligned funding and implementation exists in the event of central funding and local implementation, as is the case with ESF funds, generally focused on training, and with direct job creation and sheltered workplaces. The risk is that local governments “park” their own social assistance beneficiaries in these measures to save expenses on welfare benefits. The combination of local implementation and central funding is mostly found in Mediterranean countries, and in new Member States where ESF has an increasing role. A possible solution for aligning funding and implementation in the case of direct job creation and sheltered workplaces is to work with strictly capped budgets per municipality rather than with open-ended budgets. A solution for other active measures aimed at placing beneficiaries in jobs, is result-based funding: for example, 50% of the budget is pre-financed and 50% is financed only for those actually placed in a job.

Affordability of measures

Affordability of the social system depends only partly on labour market measures. Disability benefits and family/children allowances are both equally important spending groups. For sufficient funding of labour market policies in times of high unemployment, contribution or tax rates must be sufficiently high in times of low employment to build up funds or to reduce government debt. Social security funds can then sell assets and governments with low debts can borrow money on the financial markets. When social security fund reserves are too low, or when government debt is too high to borrow money on the financial markets, it is too late to increase contribution rates because expenditures rise faster than revenues in times of high unemployment.

The organization of labour market measures has some impact, but ultimately only limited impact, on expenditures. In the case of **passive measures**, expenditure is above all determined by the regulations that specify the entitlements, and these regulations are in turn determined by the central government in the EU. The government can in principle change the regulations on passive measures in response to a crisis, e.g., Italy and Latvia extended access to passive measures in 2009 and Ireland and Lithuania reduced access in 2009. But on the whole, expenditures on passive measures increase automatically along with the number of unemployed. Reducing access to unemployment benefits could moreover lead to increased expenditures on other measures. Although the use of early retirement as an alternative to unemployment benefits was limited in 2009, the reduction of access to unemployment benefits in Lithuania coincided with a noticeable increase in expenditures on social assistance, and the limited response of expenditures on unemployment benefits in the UK coincided remarkably with an increase in disability benefits.

However, entitlements for **active measures** are usually less strictly defined so governments can and do adjust expenditures more freely. During the latest recession, expenditures on active measures increased much less than those on passive measures. Still, there is no absolute evidence that automatically increasing expenditures on passive measures crowd out active measures. It is true that Italy, the UK, Slovakia, Bulgaria and Romania drastically cut budgets on active measures in 2009, but Poland, Greece, Hungary, Slovenia and Latvia drastically expanded budgets on active measures in 2009.

If reserves or borrowing capacities are low, all that is left is to shift budgets and human resources. This requires flexible implementation arrangements. Since especially active labour market measures are largely delivered by public employment services, a flexible arrangement could be to second employment services staff to social security funds in times of high unemployment. Another arrangement could be to start less active measures or to shift budgets to cheaper active measures. Doing so indiscriminately could lead to a higher number of unemployed in the future, but start-up

incentives are relatively costly and larger numbers of businesses fail in times of crisis. For longer lasting programmes such as start-up incentives or rehabilitation, future expenditures need to be factored in as well before starting a programme. For example, if funds in the subsequent year only allow for loans up to 100 start-ups, it seems inefficient to train 200 unemployed for entrepreneurship in the relevant year. This in turn requires forecasting and close monitoring of expenditures by budget holders, most often the social security fund and the general government.

In summary

Which institute collects contributions or taxes, or implements the policies, is not of primary importance for the sustainability of labour market measures. Active and passive measures can be implemented by different actors, as long as incentives are aligned. Rather, the contribution or tax rates should be sufficiently high in advance, either in order to build up reserves or to reduce central government debt. If budgets are low nevertheless, funds need to be reallocated. It could make sense to start less active measures in times of high unemployment in order to have funds left for activation at the start of the upswing.

4 Effectiveness of measures prior to 2008

4.1 Introduction

This chapter reviews empirical and econometric analyses of different active and passive measures. The available literature for a selection of countries and measures is reviewed to assess the effectiveness of measures. The following sub questions are addressed inasmuch as the available information allows:

1. How does the reference period of the analysis compare to the business cycle?
2. What are the most salient characteristics of the measure?
3. How many people participate in the measure?
4. How many people are estimated to find a job through the measure that they would also have found otherwise (deadweight loss)?
5. How many other workers are estimated to be displaced by participants in measures who find a job?
6. How certain are the estimates?
7. What are the strengths and the weaknesses of the measures?
8. What are the economic effects of the measures and what role do circumstances play?
9. Does the policy mix of active and passive measures provide sufficient incentives to for workers to integrate/reintegrate into work and for employers to hire new employees?
10. What is the cost-efficiency in terms of budgets involved and gained or lost taxes / contributions?

Pre-crisis evidence on effectiveness has been reviewed for eight different types of measures based on the Eurostat classification of labour market policies and for ten selected countries. Two countries were selected out of each of the five groups of countries distinguished throughout this report. Two measures were reviewed for each country, so that the total number of country-measures combinations amounts to twenty.

We applied a number of selection criteria. Availability of high-quality empirical and preferably econometric evaluation studies was the primary selection criterion. The term evaluation study refers here specifically to studies aimed at identifying the causal impact of a policy measure. To ensure high quality evaluations, for each of the ten selected countries a national expert composed a list of references to evaluation studies for each category of measures and indicated the quality of evaluation studies. As an additional criterion measures had to be major spending categories in the respective countries, according to Eurostat 2008 data.

The final selection of the 20 country-measure combinations is described in the next section. Further methodological details on the review of empirical literature are provided in Section 4.3. Section 4.4 describes the empirical findings. In the final section of this chapter, we draw conclusions and compare these with the findings of some other overview studies on the effectiveness of labour market policies to assess the general applicability of the findings for other countries.

Annex F tabulates the findings by measure and per source.

In the UK, expenditures on labour market policies are low as a percentage of GDP, except on employment services and out-of-work income support. The employment services in the UK cover a very wide range of measures in package deals. On the other hand, fewer studies have been carried out on the impact of out-of-work benefits than anticipated since more measures focus on in-work benefits, with hardly any reform since the introduction of the Job Seeker's Allowance in 1996.

For Ireland, expenditures on both training and on direct job creation as a percentage of GDP are the highest of all countries, and top-ranked papers were found for both measures.

Nordic group

NL - [2. early retirement] [3. Labour market services]
SE - [1. out-of-work benefits] [6. rehabilitation]

For the Netherlands, most top-ranked papers pertained to labour market measures and early retirement. Early retirement schemes in the Netherlands are sector schemes so that many different arrangements can be compared and are compared in top-ranked papers.

As regards Sweden, expenditures on supported employment are the highest among all ten countries after the other Nordic country (the Netherlands), and out-of-work income support was selected as the main passive scheme.

New Member States

HU - [1. out-of-work benefits] [5. employment incentives]
PL - [6. rehabilitation] [7. direct job creation]

In the new Member States, expenditures on labour market policies are comparatively low as a percentage of GDP and literature is limited for all measures.

4.2.2 Selection by measure

By measure, the selection is as follows.

- | | |
|---|-------------------------------------|
| 1. Out-of-work benefits: | Austria, Spain, UK, Sweden, Hungary |
| 2. Early retirement: | Italy, Netherlands. |
| 3. Labour market services: | Austria, UK, Netherlands |
| 4. Training: | Germany, Ireland |
| 5. Employment incentives: | Italy, Spain, Hungary |
| 6. Supported employment and rehabilitation: | Sweden, Poland |
| 7. Direct job creation: | Ireland, Poland |
| 8. Start-up incentives: | Germany |

The third category of measures according to the Eurostat classification is job rotation. We did not include this measure given that this measure is found in only a few countries, and then only with low expenditures.

We searched for references to short-term work, but only found one recent OECD paper which genuinely evaluates short-term work in a number of countries. As this paper evaluates measures as from 2008 and because this is only one paper, this paper is reviewed in the next chapter on crisis measures. One paper (in Polish) analysing short-term work in 2003-2005 was found for Poland, but again this is only one paper.

Table 4.1 shows expenditures on the different labour market policies in the ten selected countries in 2008, according to the Eurostat LMP database. Major spending categories were chosen with the exception of direct job creation in Poland, start-up incentives in Italy and early retirement in the Netherlands. Direct job creation and start-up incentives are minor spending categories in all countries, however. The Netherlands have specific early retirement arrangements that are well documented.

Table 4.2 shows the number of references to evaluation studies found by the national experts. For the selected country-measure combinations, the list of references is provided in the annex. We checked the quality of the literature and in certain cases removed literature that seemed less appropriate (e.g., the Treu reform in Italy to allow temporary work arrangements for young workers is not the same as a short-time work arrangement).

Table 4.1 Expenditures per type of measure and a selection of 10 countries, as a percentage of GDP

Country group	Continental		Mediterr.		Anglo		Nordic		New MS		Total
	DE	AT	ES	IT	UK	IE	NL	SE	HU	PL	
Type of policy measure											a)
Total expenditure	2.3	1.8	2.6	1.3	0.5	2.1	2.1	1.4	0.7	0.9	
1. Out-of-work income support	1.5	1.0	1.8	0.1	0.2	1.3	1.4	0.6	0.4	0.1	5
2. Early retirement	0.1	0.2	0.1	0.1	--	0.1	--	0.0	--	0.2	2
3. Labour market services	0.3	0.2	0.1	0.0	0.2	0.2	0.2	0.2	0.1	0.1	3
4. Training	0.3	0.3	0.1	0.3	0.0	0.3	0.0	0.1	0.1	0.1	3
5. Employment incentives	0.1	0.1	0.2	0.0	0.0	0.0	0.0	0.3	0.1	0.1	2
6. Supported empl.	0.0	0.0	0.0	0.1	0.0	0.0	0.5	0.2	--	0.2	2
7. Direct job creation	0.0	0.0	0.1	--	0.0	0.2	0.0	0.0	0.0	0.0	2
8. Start-up incentives	0.1	0.0	0.1	0.0	0.0	0.0	--	0.0	0.0	0.1	1
Total ^{a)}	2	2	2	2	2	2	2	2	2	2	20

Source (percentages): Eurostat, LMP database and Eurostat website for GDP figures.

Cells in light blue indicate final selection.

a) Total = number of countries (row totals) or measures (column totals).

Table 4.2 Number of references by type of measure and a selection of 10 countries

Type of policy measure	Continental		Mediterr.		Anglo		Nordic		New MS	
	DE	AT	ES	IT	UK	IE	NL	SE	HU	PL
1. Out-of-work income support	3	8	2	3	7	--	5	1-5	4	--
2. Early retirement	--	3	--	4	1	--	7	--	2	1 ^{***}
3. Labour market services	7	4	3	1	37	2	6	1-3	4	2
4. Training	34	7	12	2	6	6	5	>10	7	>2 [*]
5. Employment incentives	6	5	4	3	8	--	3	1-3	7	Some [*]
6. Supported empl.	19	7	--	--	2	4	5	1-3	4	5
7. Direct job creation	38	--	2	--	--	2	3	--	9	Some [*]
8. Start-up incentives	11	3	2	2	--	--	6	1	2	>2 [*]

Bold figures indicate top rated instruments by our experts -- means: none found.

*: analysed together with other ALMP's;

** : few on effectiveness, some on regulations;

***: few on labour market aspects, some on the pension system.

Cells in light blue indicate final selection.

4.3 Methodological notes

A cost-benefit analysis of a policy instrument requires information on the cost of the instrument as well as information on its revenue. Without one of both, a cost-benefit analysis is impossible. Whereas cost information is often relatively easy to obtain, information on the benefit is much harder to get, if at all. In order to compute the revenue of a policy measure, one needs to know something about the counterfactual as a reference. The share of programme participants that finds a job after participating is not a good enough reference, since a certain proportion of them may have found a job even without participating in the programme. Relying on absolute shares only implicitly assumes a reference probability of zero, meaning that without the existence of the programme, no one would have experienced a positive outcome. In most cases, such implicit assumptions lead to a strong over-estimation of the true effectiveness. At worst, it may even lead to wrong conclusions, if programme participation on average prevents individuals from finding a job as compared to non-participants. Counting the number of individuals who find a job after programme participation by definition excludes potential negative programme effects.

Therefore, identifying the appropriate counterfactual is one of the most challenging tasks in programme evaluation. The key question is “How likely would a certain individual have experienced a successful outcome, if the programme would not have existed?” If, and only if this is known, the difference between the observed probability of successful outcomes and the reference probability identifies the effectiveness of the measure. Only when based on a reasonable effectiveness measure, can one compute revenues of programme participation. This revenue may consist of avoided unemployment compensation payments, increased tax volume and the like.

Good programme effectiveness studies are in one way or another based on the idea of an experimental design. If programme participants and non-participants do not differ systematically at the point in time when participants enter into the programme, a post-programme comparison of both groups with regard to a certain outcome delivers useful estimates of programme effectiveness. More precisely, it will deliver the average treatment effect on the treated (ATET). This is definitely superior to the implicit assumption of a zero counterfactual. However, in order to be perfect, one has to identify the effect of programme introduction on non-participants as well.⁶⁹ This may be accomplished by combining the above treatment vs. non-treatment comparison after programme introduction with a before-after comparison of programme introduction. If programme introduction has a negative impact on the non-treated, this effect must be subtracted from the ATET. If programme introduction has a positive impact on the non-treated, it adds to the ATET.⁷⁰ However, as Card/Kluve/Weber (2010) point out, identification of the effect of programme introduction is still a key unsettled question in almost any empirical study on programme evaluation.

Nevertheless, it should be mentioned that identification of the ATET does not necessarily mean the identification of the overall effect of a programme as well. This is because substitution effects (including displacement) and deadweight are not reflected in the ATET. Assume, for example, that a wage subsidy is targeted at a certain type of job seeker. The overall effect may consist in an advantage of those workers over workers that do not comply with the target group definition, but may still result in a zero sum game, if companies are not willing to hire more workers in total. In that

⁶⁹ Assume, for example, a situation, where employers prefer job seekers with a certificate obtained through a training programme over job seekers without such a certificate, although the overall willingness of employers to hire workers is not affected by the introduction of this certificate. In that case, we will observe a positive ATET, but the gain of employment prospects for participants in the training programme is completely offset by the loss of employment prospects for non-participants compared to a situation in which the training certificate does not exist.

⁷⁰ For example, provision of a training programme may induce increased job search activities for non-participants in order to over-compensate the increase of employment prospects of participants.

case, the increase in employment prospects of the target group is at the expense of a decrease in employment prospects of the rest. In order to assess the overall impact of the programme, one should count the number of jobs that were created due to the wage subsidy, which would not have been created otherwise. In a zero sum case, this number would be zero. It is the overall effect that matters. However, measuring the ATET is typically based on a comparison of individuals who were promoted by the wage subsidy with individuals of the same type who were not. The ATET could be zero or positive or negative, but in no case does it reflect the impact of the programme on those not eligible for promotion. This is especially true for propensity score matching methods. In regression discontinuity designs it is sometimes possible to overcome this restriction.

Displacement refers to a variant of substitution. If companies lay off workers who are not eligible for wage subsidies in order to hire workers who are, the overall employment stock remains unchanged. Again, the overall effect of the subsidy would be zero, but this is not reflected in the measurement of the ATET.

Deadweight is a direct consequence of substitution. It means that a programme promotes activities that would have taken place anyway. The extent of this is crucial for the assessment of the usefulness of a programme. For example, the intention behind a wage subsidy for hiring low-skilled workers may be an increase in the propensity of firms to hire such workers. In practice, however, it is hardly possible to distinguish an additional hiring from a hiring that would have occurred even without the subsidy. At least one cannot rely on what the claimant says. Therefore, one can only implement the subsidy based on certain target group criteria. As a consequence, once the subsidy is implemented, it may encourage companies to apply for the subsidy, no matter whether they would have hired somebody anyway.

As already stated previously, the overall impact of the wage subsidy should be counted as the number of jobs that were created due to the wage subsidy, which would not have been created otherwise. These are typically far fewer than the number of jobs promoted by the wage subsidy. In an extreme case, companies will not hire more workers than without the wage subsidy. This would correspond to a deadweight loss of 100 per cent. This does not necessarily mean that the measured ATET is zero. In fact, if companies randomly select eligible workers and apply for promotion, we would measure a positive ATET by comparing individuals who were promoted with individuals of the same type who were not promoted, simply because promotion is becoming a synonym for being hired.

Heckman/Lalonde/Smith (1999) addressed this problem as follows: "The microeconomic treatment effect literature ignores the effects of programs on the interactions among agents ... The lessons from the treatment effect literature that ignores social interactions can be quite misleading. The challenge in estimating these general equilibrium effects is the challenge of estimating credible general equilibrium models. However, unless the challenge is met, or the social interactions are documented to be unimportant, the output of micro treatment effect evaluations will provide poor guides to public policy."

The main reason for this difficulty is a quantitative one. Since most programmes only cover a relatively small subpopulation, general equilibrium effects of such programmes are typically below any statistical detection limit. Assume, for example, a 10 per cent unemployment rate with 10 per cent coverage of unemployed by a certain programme, and an ATET of a 10 per cent increase of employment probability of participants. Even if this would translate 1:1 into a general equilibrium effect, the programme would contribute only to a 0.1 per cent rise in employment. Compared to the usual volatility of employment, such a small effect is hardly identifiable on the aggregate level.

Substitution and deadweight effects could more easily be identified on the micro level, but this would require an experimental design of programme implementation, which virtually does not exist.

To conclude, identification of the ATET is a necessary but not sufficient approach to assess the impact of a programme. In fact, most of the available studies focus on the ATET only. The ideal way to identify the ATET is to realize an experimental design in the form of Randomized Controlled Trials (RCT). They are commonly viewed as the gold standard of impact evaluation. Natural experiments and quasi experimental methods come close to the validity of RCT. The main characteristic of a proper experimental setting is being free of selection effects. In that case, an outcome comparison between treated and not-treated is sufficiently conclusive as regards the impact of a treatment. In practice, however, experimental settings are the exception rather than the rule for various reasons. For example, practitioners are often reluctant towards a random assignment of programme participants. As a result, participants and non-participants not only differ with regard to the treatment but also with regard to their characteristics. In the presence of selection effects, comparing treated and non-treated is no longer conclusive with regard to the impact of the treatment. More or less sophisticated estimation techniques may compensate selection effects, but results can easily become sensitive to specification issues.

In principle, a before-after comparison could also serve to identify the treatment effect of a measure. In practice, however, subsequently exposing the same individuals to different treatments is not a useful way to come to conclusions, the reason being that any treatment may lead to long-lasting changes to individuals to such an extent that a before-after comparison will not only compare different treatments but also different individuals. Once a treatment has been applied to an individual, its impact cannot be reset afterwards for testing the impact of non-treatment. Instead, one must rely on statistical methods that compare treated individuals with non-treated individuals before and after the treatment. By subtracting the difference in outcome of the non-treated before and after treatment of the treated from the difference in outcome of the treated before and after treatment, the causal treatment effect can be identified. This is known as the difference in difference approach. Here too, one must make sure that the results are not impaired by selectivity problems.

In practice, there are many more problems to solve. To begin with, outcomes are reported in different ways, which are hard to convert into a standardized equivalent. Some studies, for example, report the impact of a programme on unemployment duration, some indicate changes in employment probability at different points in time after programme termination, others report changes in unemployment probabilities after programme termination, and last but not least some studies focus on post-programme earnings instead.

Only very few studies report long-term effects of programme participation. In the short run, however, almost no programme may turn out as being cost efficient. For example, a training programme may easily cost several thousand Euros per participant. Whether this is offset by the revenue depends not only on the impact on employment probability but also on the remaining time horizon. Training for elderly must therefore in principal generate higher short-run revenues than training for younger workers in order to pay off.

Even if standardized effects were known, it is unlikely that different studies will converge with regard to the signs, not to mention the magnitude of the effect of a certain programme. This requires a thorough assessment of the validity of available studies. However, knowing the cost of a programme may at least help in identifying a benchmark for effectiveness in order to make a programme beneficial. The higher the costs of a programme are, the higher the related benchmark

is. So even if it may be difficult to exactly quantify the effect of a programme, one may judge empirical findings with regard to such a benchmark.

The key added value of our meta study consists of a constructive assessment of existing studies. This is easy if their results converge. However, even in the event of contradictory findings one can do more than just report them. We seek to judge the reliability of available findings according to logical criteria. Without such further assessment, contradictory findings are destructive with respect to improving knowledge. They create a situation as if no knowledge on the related issue were available. However, by actively striving for a constructive synthesis of contradictory findings we will potentially be able to overcome the neutralization of knowledge.

This could be called a qualitative approach, which makes a huge difference compared to the quantitative approach chosen by Card/Kluve/Weber (2010), Kluve (2010), and also Kluve/Schmidt (2002). The main shortcoming of quantitative literature reviews is their inappropriate treatment of contradictory findings by statistically averaging them without assessing the variation of reliability between these studies. A positive impact is simply encoded with the number 1, a negative impact with -1, and a zero impact with 0. Accordingly, if a number of studies conclude a positive impact of training on participants' employment prospects, while another series of studies concludes a negative impact of training, the quantitative approach is likely to end up with a small or zero impact of training. This is not only different from "not knowing" or not being able to decide whether there is an impact or not, but it may also be wrong with regard to what could be known, if the findings were carefully assessed. Quantitative assessments of existing findings may at best be appropriate in the face of homogenous findings. However, this condition is typically not fulfilled. But the results of statistical averaging are difficult to interpret even in case of homogenous findings. Assume for example, that each of the existing findings points to a weak but positive impact of a measure. Depending on the methodology used, this would result in a strong positive coefficient for this measure in the meta-analysis. Hence, a strong positive (negative) coefficient does not necessarily mean that the measure itself has a strong positive (negative) impact; it just means that the degree of homogeneity of findings is high.

Last but not least, it is also difficult to assess the significance level of a quantitative meta-analysis. Assume, for example, that only a few studies focus on a certain measure and unanimously point to a statistically significant impact. In this case, it is likely that the meta-analysis will result in an insignificant coefficient, which reflects the small number of observations rather than the significance of the findings themselves.

These considerations make a strong case in favour of a qualitative assessment of existing findings. A thorough assessment of contradictory findings might, for example, identify that some studies use an inappropriate methodology or that different studies refer to different periods in time with a substantial change of circumstances in between, which may be responsible for a reversal of the measured impact. This shows how a qualitative assessment of available studies may lead to unique conclusions even in the event of superficial contradictions and that this approach is superior to a purely mechanical approach. Finding the truth is simply not a matter of majority rules or statistical averaging.

The logic of our analysis is based on the recommendations for synthetic reviews made by the International Initiative for Impact Evaluation (3ie)⁷¹ and the Campbell Collaboration⁷². These originated from the field of development economics, but apply far more in general.⁷³ Synthetic reviewing means searching for a consistent story around existing findings. It is a qualitative approach rather than a quantitative approach.

Before synthesizing results, a selection rule is needed, which enables one to decide which studies to consider and which not. This is mainly a matter of reliability. In order to assess the reliability of existing findings, we will consider the following criteria:

- Internal validity of a study in terms of logical consistency;
- External validity in terms of compatibility with related findings from other studies;
- Methodological appropriateness;
- Quality of the underlying data.

Internal validity refers to the internal consistency of a study. For example, if a study reports a positive impact of a measure on a certain age group and a negative impact on a neighbored age group, this gives rise to suspect that the impact measurement is impaired by unobserved factors. Consequently, results of such a study are less credible than results of a study that shows strong internal consistency of findings.

External validity refers to consistency of results in comparison with closely related studies. If contradictions arise, we strive to identify potential sources of variation that may explain such differences. For example, if two different studies on the same policy measure arrive at contradictory findings, deviations may come from different methodologies used, different data bases, different time periods and the like. Here, a conclusive and comprehensive assessment must be made with regard to the credibility of each study.

Appropriateness of methodology and data quality are closely related to the criterion of external validity, but also apply as stand-alone criteria. If, for example, two studies result in deviating findings, with one study based on propensity-score matching and the other on a regression-discontinuity approach, then it is likely to rate the validity of the latter higher, since it is less likely affected by unobserved selectivity issues. Even if only one evaluation study is available for a certain policy measure, the credibility of its findings could be impaired if the chosen methodology appears to be inappropriate. The same holds true for the quality of underlying data.

Substantive criteria could also emerge from the fact that different studies might refer to different target groups and the measure may not necessarily work in the same way for each target group.

In order to achieve the goal, the country experts were asked to collect available evaluation studies on selected policy instruments for their country and summarize the related findings. They were also asked to classify the studies according to a standardized set of criteria as follows:

- Type of Programme
- Target group
- Database
- Sample size

⁷¹ <http://www.3ieimpact.org/>.

⁷² <http://www.campbellcollaboration.org/>.

⁷³ See for example Vaessen, J.; Leeuw, F.; Bonilla, S.; Lukach, R.; Bastiaensen, J. (2009): Protocol for synthetic review of the impact of microcredit. *Journal of Development Effectiveness*, Vol. 1, 285 – 294 or Snilstveit B.; Waddington H. (2009): Effectiveness and sustainability of water, sanitation, and hygiene interventions in combating diarrhoea. *Journal of Development Effectiveness*, 295 – 335.

- Observation period
- Method for identification of programme impact
- Success criteria
- Quantitative findings
- Internal Validity (++, +, 0, -, --)
- External Validity (++, +, 0, -, --)
- ATET (yes/no)
- Substitution effects considered? (yes/no)
- Total effect quantified (yes/no)
- Cost-Benefit Analysis available (yes/no)

4.4 Empirical Findings

4.4.1 *Out-of-work Income Support (Austria, Hungary, Spain, Sweden)*

Austria

Financial support for unemployed workers in Austria is provided mainly through two sources, unemployment benefits (UI) and unemployment assistance (UA). Both are managed by the (public) Job Centres of the Labour Market Service (Arbeitsmarktservice, AMS). A short overview on the structure of and eligibility for financial support is available in AMS (2011).

Entitlement to benefits is conditional on minimum amounts of insurance contributions as well as ability and willingness to work. Willingness to work is measured, e.g., by participating in training or regular meetings with the case worker. Typical entitlement – there are exceptions, e.g., for workers who are younger than 25 years of age – requires insurance contributions in 52 weeks during the last 24 months. The amount of UI depends on previous earnings and is typically some 55 per cent of past net wages. The entitlement period depends on past employment and is at least 20 weeks and increases to 52 weeks for unemployed who are over 50 years of age with at least 468 weeks of contributions over the preceding 15 years. Workers who voluntarily quit their jobs do not receive UI during the first four weeks of their unemployment spell.

Upon exhaustion of UI, an unemployed worker may claim UA. UA is means-tested on household income and is some 92 per cent of UI for the first six months. After these six months, UA depends on how long the unemployed previously received UI. UA is granted up to 52 weeks, but may be extended “indefinitely” upon application, if qualifying conditions are met.

Card, Chetty and Weber (2007) investigate how sensitive UI recipients are to their entitlement running out (exhaustion), the “spike” in the exit rate from unemployment upon the expiration of jobless benefits. They note a large spike in the exit rate from registered unemployment at the time of exhaustion. However, the hazards of re-employment rise only slightly and they rise much less than unemployment exit hazards when benefit entitlements expire. “This is because many individuals leave the unemployment system when their benefits expire without returning to work.” (p117). They estimate that the hazard of leaving unemployment is about 2.4 times higher in the week of benefit exhaustion than in the first 8 weeks of an unemployment spell. The hazard of finding a job is only 1.15 times higher in comparison.

Winter-Ebmer (1998, 2003) studies the impact of UI entitlement on unemployment entry showing that UI duration not only causes longer unemployment durations but also higher unemployment entry. He provides evidence that increased unemployment entry is due to more layoffs as companies seem to be more inclined to fire workers who have longer tenure (and higher wages, due to seniority rules). A new law, the Austrian Regional Extended Benefits Program (AREBP),

extended the potential benefit duration from 52 to 209 weeks for workers who: (i) were above the age of 50; (ii) had worked more than 780 weeks in the previous 25 years; (iii) lived and had worked in a specific county; and, (iv) had not voluntarily quit or had not been fired for misconduct by their former employers. Using the quasi-experimental nature of the reform, he estimates that older workers in the experimental counties who were eligible for extended benefit duration were between 4 and 11 percentage points more likely to enter unemployment in 1988 and subsequent years.

Lalive and Zweimüller (2004) also evaluate the Austrian Regional Extended Benefits Program, which granted an extended UI entitlement to older workers in certain regions, as to its effect on the length of unemployment durations. In contrast to other studies that evaluate this program (Lalive, 2007, 2008; Lalive, van Ours and Zweimüller, 2006; Winter-Ebmer, 2003), they explicitly consider the endogeneity of the policy as it was imposed as a reaction to poor labour market conditions. Using different estimation approaches, they find that the increase in UI entitlement led to a lower job transitions rate (-17 per cent) and thus increased the unemployment duration (+9 weeks).

Lalive (2007) investigates how extended UI entitlement for older workers discourages searching for jobs. He employs a regression discontinuity framework and estimates that "large benefit extensions increase unemployment duration, reduce transition to a regular job, and increase the duration until a new job is taken." (p.111) He does not find impacts on the earnings in the post-unemployment job. Small benefit extensions, however, do not lead to longer unemployment durations.

Lalive (2008) similarly studies a programme that extended the maximum duration of unemployment benefits from 30 weeks to 209 weeks for workers affected by the difficulties in the steel sector in the 1970s. He finds that job search increases by about 0.09 weeks per additional week of benefits for men. For women, the corresponding effect is about 0.32 weeks.

Lalive, van Ours and Zweimüller (2006) study the generosity of the UI system and the effects on unemployment durations. A policy change that had a different effect on several groups of unemployed is used for analysis: a first group experienced an increase in the replacement rate, a second group received a longer entitlement to UI benefits, a third group had both a higher replacement rate and a longer entitlement, and a fourth group did not experience any change. They find that both the increase in the replacement rate and the extension of entitlement significantly increased unemployment durations.

Böheim and Weber (2011) analyse the consequences of starting a low-paid job for the search behaviour of unemployed workers. This type of employment is a form of wage subsidy as the unemployed do not lose their unemployment benefits if the wage from this employment is below a certain threshold. The results suggest that selection into marginal employment is "negative", i.e. workers with characteristics usually associated with low-productivity are more likely to select into such jobs. Consequently, they find that those who engage in petty jobs while claiming unemployment benefits are less often employed, more often unemployed, and have lower wages. The effects are bigger for men than for women, and decrease over time. Three years after having subsidized employment, women and men are estimated to earn about 6 per cent lower wages than the comparison group.

Summing up, the available evidence for Austria clearly indicates that the maximum duration of entitlement to unemployment benefits increases unemployment duration. A main driver for this appears to be the use of unemployment compensation by individuals who intend to leave the labour market. They typically request unemployment benefits up to the maximum period resulting in an exit spike at this point in time.

Hungary

The Hungarian unemployment benefit system has been adjusted several times since its establishment in the late 1980s. Most of the reforms have been aimed at cutting costs by reducing the replacement rate or the entitlement period which had been initially relatively generous compared to other post socialist countries in Europe. As shown in the table below, the prior employment condition was the only element of the UI scheme that was not tightened during the 1990s. Between 1991 and 2000, the maximum duration of unemployment benefits was cut from two years to 9 months, the replacement rate from 70 per cent to 65 per cent of gross earnings (with a temporary rise to 75 per cent between 1993 and 1997), the maximum UI benefit from three times to twice the minimum wage (1992), and the benefit floor and ceiling were not adjusted for inflation between 1993 and 1996, at a time when price levels rose by around 20 per cent per year (Nagy, 2002).

Table 4.3 Changes in the Entitlement Conditions of UI

Year of introduction	Prior employment condition	Duration		Waiting period in case of	
		Minimum	Maximum	Voluntary quit	Severance pay
1989	18 months/3 years	24 months	24 months	smaller benefit	None
1991	12 months/4 years	180 days		3 months	
1992		135 days	18 months	Same as months of severance pay	
1993		90 days	360 days		6 months
1997				3 months (90 days)	
1998					
2000	200 days/4 years	40 days	270 days	None	
2006*	365 days/4 years	73 days	360 days		

* November 2005, no change until June 2010. Sources: Nagy (2002), Frey (2010).

The eligibility conditions of the means-tested unemployment assistance (UA) scheme did not change until 2000. The first major reform of the UA came as part of a workfare reform aiming to boost employment by strengthening labour supply incentives implemented between 2000 and 2002. Measures included the introduction of mandatory activation plans for registered job seekers, cutting the maximum duration of UI, merging UA with the regular social assistance and doubling the minimum wage in two years (Duman and Scharle 2011). In 2000, UA was merged with the more general social assistance scheme and made available regardless of prior work history.⁷⁴ The benefit level was cut from 80 per cent to 70 per cent of the minimum old-age pension. The new scheme maintained the character of unemployment assistance (UA) support in that eligibility was conditional on co-operation with the job centre or the local welfare agency. In addition, the work test was considerably strengthened in an effort to focus more on activation and workfare (Frey, 2001).

⁷⁴ Except that the claimant had to prove that they had cooperated with the local job centre or municipality for at least 12 months within the past two years (as proof of their long term unemployment).

Table 4.4 Changes in the Generosity of UI

Year of introduction	Benefit in proportion of previous gross wage (and maximum duration)			Calculation of average earnings	Benefit	
	phase 1.	phase 2.	phase 3.		Minimum	Maximum
1989	70 % for 6 months	60 % for 6 months	45 % in the second year	base wage in last month + monthly average of additional earnings in last year	1989: none	phase 1.: 300 % of minimum wage phase 2.: 200% of min w
1990					0.8*min w	
	min w	300% min w				
1991	70 % for 360 days	50 % for 360 days	-	average earnings in 4 calendar quarters before job loss	min w	200% min w
1992	70 % for 360 days	50 % for 180 days				
1993	75% for 90 days	60% for 270 days	-		8 600 HUF	phase 1.: 18 000 HUF; phase 2.: 15 000 HUF
1997	65% (no phases) for 360 days (270 days after 2000)				90% of min pension	180% of min pension
2003	65% for 270 days		85% of min wage for 180 days		(22 230 HUF in 2005)	(44 460 HUF in 2005)
2006*	60% for 91 days	60% of min wage for 179 days	40% of min wage for 90 days		60% of min wage (37 500 in 2006)	120% of min wage (75 000 in 2006)

Notes: * November 2005, no change until June 2010. ** this column gives the length of the first, typically more generous phase of UI, compared to the total duration of UI benefit (shown in table A3); min w=minimum wage, min p= minimum old age pension. In Hungarian, phase 1-2 was called „munkanélküli járadék” until 2005, when it was renamed “álláskeresési járadék”. Phase 3 is called “álláskeresési segély”. Phase 3 is insurance based. Eligibility conditions are either 200 days (140 days for those less than 5 years before pensionable age) of prior employment or exhaustion of phase 2.

Sources: Duman and Scharle (2011) based on Nagy (2002), Frey (2010).

Table 4.5 Changes in the Entitlement Conditions of the Unemployment Allowances

Year of introduction	Prior employment condition	Means test		Activation criteria / work test
Before 1989	SA – none	-		SA - none
1992	UA – exhausted eligibility for UI SA – none	UA – monthly (per capita) family income is below widows' minimum pension	SA – monthly income is below widows' minimum pension	UA – min. 18 years old, capable of work, unemployed, not in receipt of UI benefit SA – none, may work limited hours
1993	UA – exhausted eligibility for UI SA – none	UA – monthly (per capita) family income is below 80% of minimum pension		
1997	UA – exhausted eligibility for UI SA – 2 years of prior cooperation with job centre		SA – own monthly income is below 70%, per capita family income is below 80% of minimum	UA – min. 18 years old, capable of work, unemployed, no UI benefit SA – cooperation with job centre or family centre
2000	UA – exhausted other allowance or 1 year of prior cooperation with job centre	UA – own monthly income is below 70%, per capita family income is below 80% of minimum pension, no property (except for own housing) SA merged into UA (the new UA was named 'social assistance' but requires a work test)		UA – min. 18 years old, capable of work, unemployed, no UI benefit, take part in 30 days of public works
2006 April		UA- equivalent family income** is less than 90% of minimum pension		
2009		UA – equivalent family income** is below 90% of minimum pension	SA – equivalent family income** is below 90% of minimum pension	UA – public works of at least 90 days/year, cooperate with job centre SA – cooperate with family

Sources: Duman and Scharle (2011) based on Gábos (1996), Nagy (2002), Frey (2010).

Notes: UA=unemployment assistance (jövedelempótló támogatás), SA=social assistance (rszs).

** Equivalence scale changed (consumption unit instead of per capita). When splitting the UA and SA in 2009, the SA kept its old name "rendszeres szociális segély" (regular social assistance) and the UA was called "rendelkezésre állási támogatás" (availability allowance).

Table 4.6 Changes in the generosity of SA and UA

Year of introduction	Amount		Duration
	UA	SA	
1992	80% of the minimum pension (top up to own income)	According to need, up to minimum widow's pension	UA, SA – unlimited
1995 July			UA – max 2 years SA – unlimited, annual review
1997		70% of the minimum pension (top up to own income)	UA – max 2 years SA – unlimited, annual review
2000	70% of the minimum pension (top up to own income)		Unlimited with annual review of entitlement
2006 May	Top up of equivalent income to 90% of minimum pension		
2007	Top up of equivalent income to 90% of minimum pension, but no more than minimum wage		
2009	Flat rate = minimum pension (about 39 % of minimum wage)	Top up of equivalent income to 90% of minimum pension, but no more than net minimum wage	UA, SA – Unlimited with review every 2 years

Sources: Duman and Scharle (2011) based on Gábos (1996), Nagy (2002), Frey (2010).

Insured and means-tested unemployment benefits played roughly equal roles in supporting job seekers. With the increase of long term unemployment, the share of UA claimants reached 45 per cent of all unemployment benefit recipients by the late 1990s and has ranged between 50 per cent and 60 per cent since then (IE, 2009).

These reforms have been studied relatively extensively, both in comparison to active labour market programmes in Hungary and to similar reforms in Eastern Europe. This is most likely due to the frequency and nature of the reforms and to the availability of administrative data from the unemployment register, which are of high quality and accessible to researchers. Eleven estimates have been identified that measure the impact of some unemployment benefit schemes in Hungary. Most of these estimates exploit the quasi-experiments created by changes to the system, which are always grandfathered, i.e., only affect new entrants.

Four of these estimates refer to the UA benefit and are comparable as they all measure the effect of UA benefit on re-employment probabilities. All use a similar estimation strategy and find minor but significant negative effects with no significant difference between men and women. The first estimate, relating to the spring of 1994, found a somewhat bigger effect of -0.144 (-0.157 for women), the second, relating to the spring of 2000 estimated an effect of -0.043 for one group and -0.07 (-0.062 for women) for another, where the second group was eligible only to a new and less generous scheme. The third estimate for pooled data from 2001-2004 is -0.0596 (-0.0557 for women) and this is the average marginal effect (Firlé and Szabó 2007). The fourth estimate (also for 2001-2004) is slightly higher for men, but not directly comparable as it is more likely to be plagued by selection bias. The differences between these estimates appear to be minor and may simply be the result of autonomous changes in behaviour (i.e., the supply elasticity of the benefit amount), of changes in the design of the social benefit or of differences in the estimation strategy and the data.

There are seven estimates on the disincentive effects of the UI scheme. Five of these are comparable as they pertain to the replacement rate and length of entitlement whilst the other two focus on other aspects of the UI benefit. Three of the five estimates exploit the same reform of 1993

as a quasi experiment while one paper uses the reform of 2000. The reform of 1993 affected both the replacement rate and the length of entitlement, whilst the 2000 reform affected only the latter. Köllő (2001) uses cross section variation in data from the unemployment registry and detailed survey data for 1994 and 2001 to examine the entitlement effect (defined as the timing of job exits, which is supposed to reflect the impact of the remaining length of the entitlement period on the probability of exit.)

Two of these papers, Köllő (2001) and Wolff (2001), attempt to handle a problem identified by the earlier papers, which is that recalled workers (more precisely the difference in their share in the treatment and control groups) can bias results. Recalled workers are workers that are temporarily dismissed and hired again soon after, as can be the case for construction workers in winter. Both studies confirm the cautious interpretations of results in Micklewright and Nagy (1995) and Galasi and Nagy (2002) that the higher re-employment rate of recalled workers explained most of the difference in estimated hazard functions in their estimates. Recalled workers typically lose their job at the end of December or early January, claim UI benefit in January and get rehired in March or April. The 1993 reform was introduced in January 1993, so the appropriate control group was the December inflow and thus included a lower share of recalled workers, whilst the treatment group was the January inflow, which included a higher share of recalled workers. Wolff (2001) shows that this was indeed likely to increase the hazard of the treatment group in Micklewright and Nagy (1995), by identifying subgroups of workers more and less likely to be recalled workers (using information on their prior job history).⁷⁵ Excluding recalled workers, Wolff (2001) finds no robust effect of the shorter entitlement period for men, and a small but robust effect for women aged below 30.

In 2000, the reform was implemented in February so January claims formed the control group and February claims formed the treatment group, with the latter having a lower share of recalled workers. This is likely to have affected estimates in Galasi and Nagy (2002a). Köllő (2001) controls for this potential bias by using survey data on re-employment (including explicit information on whether the worker was rehired by his/her old employer) taken in the spring of 2001.⁷⁶ Assessing various specifications, he finds no effect of the replacement rate on exit probabilities. The remaining entitlement period and the expected total benefit amount have a significant effect in that exit rates rise towards the end of the entitlement period. However, the effect is very small for most workers except the small subgroup of job seekers with secondary or higher qualifications.

Finally, there are two estimates that also concern the UI benefit, but cover two different questions that cannot be compared either to each other or to the other five papers. Köllő and Nagy (1996) measure the impact of the length of a UI spell on the wages of re-employed workers. Micklewright and Nagy (2004) measure the effect of tightening behavioural conditions on the probability of exit to a job or an active labour market programme.

Spain

As summarized in Jaumotte (2011)⁷⁷, unemployment benefit net replacement rates in Spain are broadly in line with the European Union (EU) average, but with a steeper profile. Overall, the average net replacement rates over the first five years of unemployment are somewhat below the EU average, but still at an internationally high level of 50 per cent. In fact, initial net replacement rates are among the highest in the EU15, at 77 per cent, but by the fifth year of unemployment, benefits (including social assistance) are at 41 per cent, a value clearly below the EU average. The

⁷⁵ As already suspected by Micklewright and Nagy (1995: 15).

⁷⁶ So the downside of this study is it cannot use the quasi experimental situation, only cross section variation in the UI pool.

⁷⁷ <http://www.imf.org/external/pubs/ft/wp/2011/wp1111.pdf>.

steep slope seems adequate as the high initial replacement rates provide strong support to families when they have just lost their jobs, while the sharp expected decline in benefits strengthens incentives to return to the labour market.

For Spain, there are currently only two evaluation studies, which address the impact of unemployment benefits on job finding rates. The two studies apply a similar methodology but using different data sets: Gonzalo (2002) uses data from the Labour Force Survey while Jenkins and Garcia-Serrano (2004) analyse Public Employment Services records. Taking into account the different nature of the data, the second study seems to be more reliable on the grounds of the higher quality of the information. However, in both cases, the results are very similar.

Gonzalo (2002) concludes that unemployment insurance benefits (UI) have an important role in the variations of the probability of getting a job over time. The unemployed who enjoy the UI benefit entitlement have lower probabilities of getting a job than those who do not. Besides this, the search effort and the probability of accepting a job offer usually increases as the entitlement exhaustion approaches. But, once the UI entitlement is exhausted, neither the search effort nor the probability of accepting a job offer seems to increase. This implies that, during the considered period, the Spanish unemployed do not face up to important liquidity or wealth constraints either because of financial assistance other than the UI or the family's financial support. It is worth mentioning that the author reports coefficients rather than marginal effects, so it is impossible to provide a quantitative assessment based on this first study.

The analysis by Jenkins and Garcia-Serrano (2004) shows that the estimate of the elasticity of the re-employment probability up to UI benefit levels was -0.18. This estimate, which was robust to different specifications, is clearly smaller than the elasticities reported for other EU countries by similar studies (between -0.6 and -0.9). However, it is worth mentioning that the comparison is probably unfair as their sample excludes workers who were temporarily laid off – a group expected to be relatively unresponsive to variations in benefit levels. Another aspect that should be taken into account is that the small benefit “level” elasticity identified by these authors may be contrasted with the large benefit “receipt” effect found in other studies for Spain.

In any case, Jenkins and García-Serrano (2004) provide another interesting result: firstly, they find that eligibility for unemployment assistance (UA) benefits has a substantive effect on re-employment probabilities: 7 per cent lower. Secondly, time-to-exhaustion effects are also relevant. The impact on the re-employment probabilities of moving 1 month closer to UI exhaustion was small (close to 0) for anyone who was between 24 and 7 months away from exhaustion. However, the impact on the hazard of moving 1 month closer to exhaustion when a UI recipient was 3 months from exhaustion was an increase of 12 per cent, other things being equal. The effect of moving from 2 months away from exhaustion to the final month of entitlement was also to increase the hazard by 12 per cent. According to the authors, the principal difference between the results for Spain and those reported for other countries is that the rise in the hazard immediately prior to exhaustion is much less pronounced in Spain.

Lastly, they also investigated whether monthly UI benefit effects differed for unemployed with relatively high replacement rates (over 90 per cent) compared with those with lower replacement rates, but found no statistically significant differences.

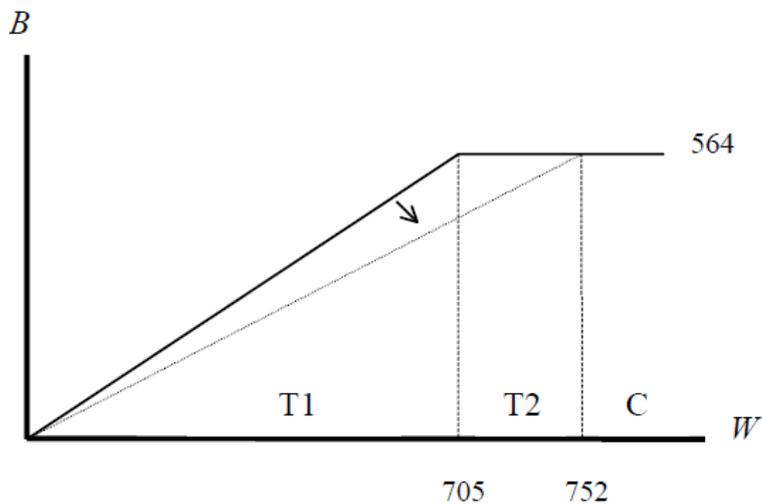
Sweden

Unemployment insurance benefits in Sweden require the fulfilment of an employment requirement and a membership requirement. An unemployment assistance system is in place for those who do not meet the membership requirement. Compensation for unemployment assistance is unrelated to

previous earnings and the generosity is much lower than unemployment insurance. The maximum pay-out duration of unemployment insurance is normally 300 days but for those with children under 18 years of age it is extended to 450 days. The minimum benefit is 320 SEK per day and the maximum is 680 SEK (the benefit is paid five days per week and 9 SEK is approximately 1 Euros). For those with previous earnings between the minimum and maximum amounts the replacement rate is 80 per cent during the first 200 days and 70 per cent thereafter.

Carling et al. (2001) evaluate the effect of a cut in the replacement rate on job finding rates among unemployed insured individuals. The reform was implemented in 1996 and the replacement rates were cut from 80 to 75 per cent. Due to a ceiling in the unemployment insurance benefit, only a fraction of the unemployed was affected by the reduction in replacement rates. Job finding rates before and after the reform are compared among those affected and those not affected. The estimates show an increase in the transition rate of roughly 10 per cent. They also report evidence of anticipatory behaviour among the unemployed. The effects of the reform seem to occur several months before its actual implementation in January 1996.

Figure 4.1 Unemployment Benefits in Sweden in the mid-1990s



Note: The solid (dashed) line depicts the replacement rate before (after) January 1, 1996.

Source: Carling et al. (2001).

Figure 4.1 illustrates how benefits (B) varied with earnings (W) for eligible workers. In 1996, the maximum benefit was 564 SEK per day. Before January 1996 the replacement rate was 80 per cent (the solid line), up to a ceiling at 705 SEK per day. After the cut in the replacement rate as from January 1996 (the dashed line), the ceiling had increased to 752 SEK per day. This change in benefits implies the allocation of three groups of individuals, labelled T1, T2 and C in Figure 4.1. Group T1 includes people with replacement rates of exactly 80 per cent before the change; group T2 consists of workers with pre-unemployment earnings in the interval 705 SEK to 752 SEK; group C, finally, includes workers who were not affected by the cut in benefits. We will refer to T1 and T2 as "treatment groups" whereas C is the "control group".

The data used comes from LINDA, a register-based longitudinal database for Sweden. This data base has been extended by three sources of register data; HÄNDEL, AKSTAT and loF. HÄNDEL originates from the public employment agencies in Sweden and contains the basic information on the length of unemployment spells as well as some data on personal characteristics. AKSTAT includes information on benefits for unemployed individuals who are entitled to regular

unemployment insurance or assistance. IoF contains information on income and wealth as well as a host of data on personal and household characteristics.

The sample is drawn from the flow into the unemployment registers during 24 months over three years: 1994 (the last six months), 1995 (all twelve months) and 1996 (the first six months). Individuals are followed until they escape unemployment or, at the most, until July 1997. The sampling procedure resulted in 45,125 individuals. 22,265 of those had no unemployment insurance or assistance, 2,384 received assistance and 20,476 received regular insurance compensation. The sample selected for the analysis comprises only those entitled to regular unemployment insurance. A further limitation was to set the upper age limit to 54 and to exclude workers with reported health problems. The final sample contained 18,429 individuals.

The general strategy for estimating is based on a difference-in-difference procedure. The change of the hazard rates for the treatment group(s) and the control group before and after the policy change are evaluated. If the hazard rate of re-employment for a treatment group increases more (declines less) than the hazard rate for the control group around the 1st of January 1996, then the reform increased the hazard rate. In the estimation of the hazard rate both time constant and time varying covariates are included as well as time effects. Several robustness checks were also carried out.

The estimated elasticity of the hazard rate with respect to benefits is about -1.6 which would imply that holding other factors constant, a 1 per cent higher benefit decreases the hazard rate with 1.6 per cent. Since the results indicate a lower exit rate for women, Carling et al. repeated the estimation separately for men and women. The benefit effects do not differ significantly between the two groups, but the effects of having children do. Having small children means a 30 per cent lower exit rate for women but only 10 per cent lower rate for men. The pattern is reversed for older children: having older children is associated with a 25 per cent higher exit rate for women whereas the effect is only 5 per cent for men.

Further results show that non-Nordic immigrants have job finding rates that are more than 40 per cent lower than the exit rates for Swedish citizens. Having young children (age 15 or less), implies much lower exit rates, whereas older children are associated with higher exit rates. Better education is not uniformly associated with higher escape rates, although a long university education appears to make a significant difference. Improved work experience has the expected positive effects. Finally, no significant effects of the previous wage and non-labour income were found, where non-labour income includes the person's income from capital and the income of the spouse.

Compared to similar studies from other countries, Carling et al. conclude that their results are on the upper side. For instance, they refer to Layard et al. (1991) who characterize the literature as follows (p. 255): "The basic result is that the elasticity of the expected duration with respect to benefits is generally in the range 0.2-0.9 depending on the state of the labour market and the country concerned, although estimates as low as 0 (Atkinson et al. 1984) and as high as 3.3 (Ridder and Gorter 1986) may be found". Thus the reported elasticity of 1.6 is relatively high.

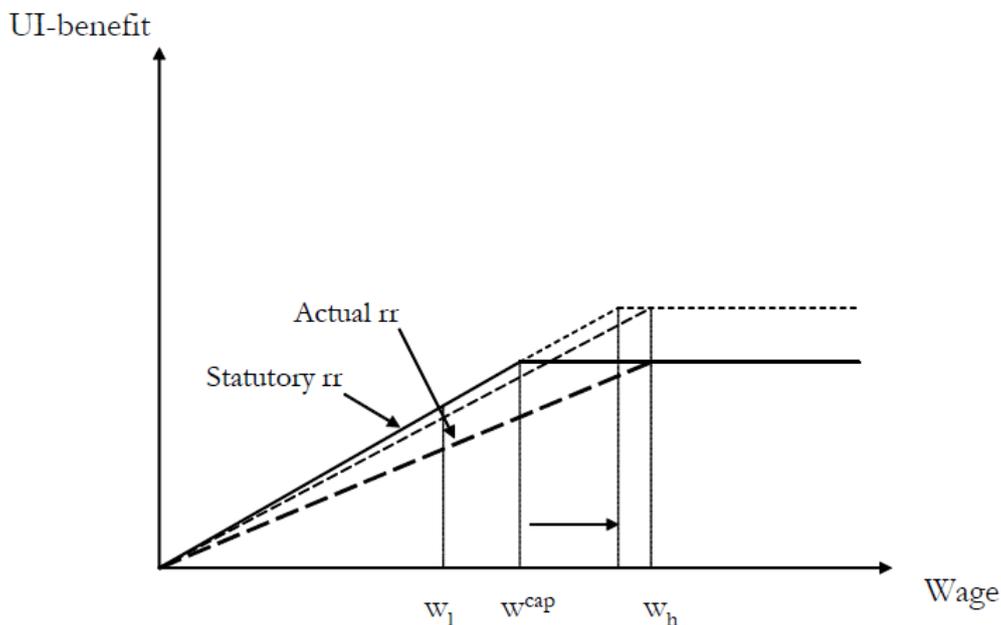
Fredriksson and Söderström (2008) examine the relationship between unemployment benefits and unemployment using Swedish regional data. In order to estimate the effect of an increase in unemployment insurance on unemployment they also exploit the ceiling on insurance benefits. However, in contrast to Carling et al. (2001) they utilize the fact that there are regional wage differentials and that these differences imply that the generosity of the benefits varies regionally. The actual replacement rate also varies within a region over time due to variations in the benefit ceiling. They report that increases in the actual replacement rate contribute to higher

unemployment and also that removing the wage cap in the determination of the unemployment insurance (UI) benefit level would reduce the dispersion of regional unemployment.

Fredriksson and Söderström argue that unemployment insurance affects other margins than individual unemployment duration alone. For instance, unemployment insurance may affect wage-setting and quitting behaviour. Fredriksson and Söderström focus on the general equilibrium effects of variations in the generosity of the insurance. They argue that aggregate time series data have the potential of capturing these general equilibrium effects, but the use of aggregate data also creates identification problems.

They utilize regional panel data when the variation is due to a nationally determined policy. Also, as Carling et al. (2001), they use the fact that the amount of benefits received is capped and so increases in income above the cap produce no increase in the actual benefit. This together with the fact that there are regional wage differences implies that the actual replacement rate of unemployment insurance varies regionally. Also, variation will occur within regions over time because changes in the ceiling produce regional variations in generosity depending on whether the region is above or below the ceiling before and after the policy change. However, there is also an identification problem since regional wages and wage growth are endogenous with respect to regional unemployment. To solve this problem micro data is utilized in order to obtain predicted wages. Swedish micro data for the period 1974–2002 is used. A wage is predicted for each individual and time point and interpreted as being the wage for an individual if his or her characteristics were priced on the national labour market. The unemployment insurance and replacement rate are constructed based on this predicted wage. Finally, the measures of unemployment insurance are aggregated to the regional level and related to regional unemployment.

Figure 4.2 The effects of variations in the benefit ceiling



Source: Fredriksson and Söderström (2008).

Figure 4.2 from Fredriksson and Söderström shows that a wage growth in the high-wage region will lower the actual replacement rate and also that an increase in the nominal replacement rate will have the biggest effect on the generosity of unemployment insurance in the low-wage region. Other possible sources of variation are also illustrated in the Figure. Consider two regions where mean

wages are the same and coinciding with wcap. Suppose, further, that in the two regions the wages are symmetrically distributed around the mean. Then, in the region with the greater variation in wages, the top half of the distribution will, on average, have a lower actual replacement rate. Thus, the standard deviation of the wage distribution should be negatively associated with the actual replacement rate.

To conclude, the identification strategy is based on the differential effects of changes to the wage cap and the statutory replacement rate. Increasing the wage cap raises the actual replacement rate more in regions where wages are expected to be higher, whilst increasing the statutory rate raises the actual replacement rate more in regions where wages are expected to be lower.

Three data sources are used, LINDA – an individual (register) data base –, regional unemployment data from the Labour Force Surveys and regional active labour market programme rates from the Labour Market Board.

As already mentioned previously, individual data is used to estimate earnings equations. The estimated earnings equations are used to generate predicted wages. Having generated these expected wages we calculate the average of these wages at the regional level and the actual generosity of unemployment insurance at the regional level. All individuals between the ages of 16 and 59 are included. The observation period stretches from 1970 to 2002. In the early 1970s data contains roughly 130,000 individuals per year; in 2002 this figure amounts to about 150,000. The number of regions for the full time period is 24.

The findings suggest that the actual replacement rate has a positive and significant effect on unemployment. The size of this effect is quite large; unemployment rises by 5 per cent in response to an increase in the actual replacement rate of 1 percentage point.

An interesting result concerning both studies is that they imply relatively strong incentive effects of unemployment insurance. In Carling et al. (2001) this effect is measured on duration of unemployment and in Fredriksson and Söderström (2008) on the number of unemployed. An argument in favour of these relatively large effects is that both studies are based on high quality register-based data. Also, the fact that the Swedish-based studies report large incentive effects might be because the replacement rates are relatively high.

UK

While for the UK there is abundant literature on unemployment durations, most recent papers focus on duration dependency of exits to employment, e.g. Stewart (2007) and references therein. Policy evaluations of out-of-work income support in the UK date mostly from the 1980s, except for two 2009 papers on the introduction of the Job Seeker's Allowance (JSA) in October 1996. Because much of the Anglo-Saxon literature on out-of-work income support refers to the early UK studies, we included some studies from other Anglo-Saxon countries, and discuss papers more briefly than in the previous sections.

A literature overview of Ecorys (2004)⁷⁸ summarizes a number of papers analysing the impact of unemployment benefits and search requirements for the UK. For the UK, a number of papers in the 1980s show that lower benefit levels result in shorter unemployment benefit durations. In 1980 Lancaster and Nickell wrote a joint paper on the relation between re-employment rates and the

⁷⁸ Peters, M., R. Dorenbos, M. van der Ende, M. Versantvoort and M. Arents (2004), Benefit Systems and their interaction with active labour market policies, Ecorys: Rotterdam, 17 February 2004.

replace ratio of benefits to wages.⁷⁹ Their estimates are based on a stock of 426 unemployed men of 18 years and over. They formulated re-employment rates as a function of several variables including the replacement ratio, duration of unemployment, age, family status, ill health and local labour demand. The authors used the weight of the replacement ratio in that function to calculate the elasticity of unemployment to the benefit levels at the mean unemployment duration. They find that the elasticity of the unemployment duration in weeks with regard to the benefit level is 0.95 in the first 20 weeks and is insignificant thereafter. Over the whole unemployment spell the average elasticity is 0.53. Based on the elasticity of 0.53 Atkinson and Micklewright (1991) conclude in their review that “this would mean that a 10 per cent rise in benefits would be associated with a rise of one week if the duration were 17 weeks. These estimates suggest that only quite large cuts in benefits could raise outflows sufficiently to reduce unemployment by a substantial amount.”⁸⁰ Using longitudinal data, Narendranathan et al. (1985)⁸¹ found a smaller elasticity of 0.3 and also that a significant benefit effect persists after six months in the case of teenagers only, a group excluded in the Lancaster and Nickell studies.

Lancaster and Nickell (1980) and the comments published together with their article already noted a problem of separately identifying the dependence of exit rates on benefit levels and unemployment duration. The effect of the unemployment duration can take place in two ways: people with good job prospects tend to find jobs more quickly, and also the chance to find a job seems to decrease the longer one is unemployed. An identification problem arises however if benefit levels decrease with unemployment duration. Atkinson and Micklewright (1991) also hypothesized that if benefit processes were more closely modelled, the effect of benefit levels on unemployment durations could well disappear. Later UK studies on unemployment contribute rather to an on-going debate on duration dependency of exit rates rather than the impact of labour market policies.

Although the UK academic literature on unemployment levels and durations moved away from the relationship with benefit levels and maximum benefit durations towards duration dependence, there is interesting literature from other Anglo-Saxon countries. Katz and Meyer (1990) found a spike in the exit rates from unemployment around the time of benefit exhaustion for the USA.⁸² The sudden insensitivity of exit rates from unemployment to benefit levels found by Lancaster and Nickell in 1980 could be explained by the maximum contribution-based benefit duration, which was 15 weeks in a year in 1911 and has been increased up to 182 days (26 weeks) nowadays.

Layte and Callan (2001)⁸³ used the Irish Household Panel data (LIPS) from 1993-1999 to analyse how many unemployed were still unemployed in the next wave of the survey two years later, taking account of the duration of unemployment at the time of the first interview in which the respondent was unemployed. They found a significant elasticity of -0.02 on the exit rates for unemployment benefit recipients and an insignificant elasticity of -0.01 on for unemployment allowances. The authors compare this result with the literature and suggest they take more precise account of benefit mechanisms, notably the time to benefit exhaustion. The authors do not refer to differences in benefit systems, but it should be noted that Irish replacement rates are higher than in the UK, so that the lower insensitivity could be real. Also the maximum benefit duration in Ireland is higher, so

⁷⁹ Lancaster, T. and S. Nickell (1980), The Analysis of Re-employment Probabilities for the Unemployed, *Journal of the Royal Statistical Society. Series A (General)*, volume 143, issue 2, 141-165.

⁸⁰ Atkinson, A.B. and J. Micklewright (1991), Unemployment Compensation and Labor Market Transitions: A Critical Review, *Journal of Economic Literature*, vol. 29, no. 4, 1679-1727, page 1711; the calculation is $10\% \times 0.53 / 17 \text{ weeks} = 0.9 \text{ week}$.

⁸¹ Narendranathan, W., S. Nickell and J. Stern (1985), Unemployment Benefits Revisited, *Econ. J.*, 95(378), pp. 307-29.

⁸² Katz, L., and B. D. Meyer (1990): The Impact of the Potential Duration of Unemployment Benefits on the Duration of Unemployment, *Journal of Public Economics*, 41: 45.72.

⁸³ Layte, R. and T. Callan (2001), Unemployment, Welfare Benefits and the Financial Incentive to Work, *The Economic and Social Review*, Vol. 32, No. 2, July, 2001, pp. 103-129.

that a difference in exit rates accrues over a longer period in Ireland. Layte and Callan conclude that higher unemployment benefit levels do prolong unemployment durations, but that the effect is small. This conclusion is similar to the old UK literature. Layte and Callan also conclude that their finding is contrary to the hypothesis of Atkinson and Micklewright (1991) that better modelling of benefit mechanisms might eliminate the effect of benefit levels on unemployment durations estimated by Lancaster and Nickell (1980).

However, a few recent studies on on-out-work income support focus on the impact of the Job Seeker's Allowance (JSA) which replaced the previous unemployment benefit and income support in October 1996. Manning (2009)⁸⁴ and Petrolongo (2009)⁸⁵ analysed the impact of this reform on the people before and after this reform. Benefit claimants search more intensively and also more prolonged than non-recipients, Wadsworth⁸⁶ found in 1990. The JSA has more strict job search requirements than the previous benefit and income support. Manning and Petrolongo both find that the introduction of the JSA reduced the number of claimants (by 8 per cent according to Manning, page 30). However neither find a more effective job search, at least not in the short run (Manning) and partly attributable to exits into Incapacity Benefits (Petrolongo). Both conclude that job search requirements work as a sanction rather than an incentive. Petrolongo argues that the termination of unemployment benefits with job search requirements only moves beneficiaries to other types of benefits with job search requirements at all, with detrimental effects on job finding rates. While this detrimental effect is uncertain in general, she concludes on page 26 "the estimated effects tends to be stronger for 16-24 than for the 25-64 year old sample."

To conclude, higher levels and longer durations of unemployment benefits do prolong unemployment spells in the UK, at least in the 1980s. The effect is small but significant. Nevertheless the impact of benefit levels is not an issue in the UK in either labour market policies or academic research in the past fifteen years. Apparently, it is felt that the Job Seeker's Allowance is sufficiently ungenerous in the balance between lower expenditures and social aims. A finding of recent research on the Job Seeker's Allowance in the UK is that stricter job search requirements seem effective in reducing the number of claimants by excluding those who cannot prove sufficient job search, although the stricter job search requirements apparently do not lead to more jobs being found. Hence, stricter job search requirements seem to work as a sanction rather than an incentive.

Conclusions from variations across countries

The available evaluation studies for Austria, the UK and Sweden suggest that the level of unemployment compensation has a negative impact on re-employment probabilities. One study for Spain suggests that the impact of benefit levels is mitigated by support from the family, but also that the replacement rate rapidly decreases during the unemployment spell. Evidence for Hungary is mixed. A previous overview study by Ecorys (2004) indicated that higher benefit levels reduced outflow into employment in the US and the UK, but that the impact was generally not significant in the rest of the EU-15. An explanation for the difference between US and UK on the one hand and the rest of the EU-15 on the other hand could be that re-employment rates are more sensitive to benefit levels at the start of the unemployment spell. The UK studies of the 1980s indicate this, and this could explain the stronger effects found in UK and US where maximum benefit durations tend to be shorter. Another possible explanation is that re-employment rates are more sensitive to benefit levels at less generous benefit levels.

⁸⁴ Manning, A. (2009), You Can't Always Get What You Want: the Impact of the UK Jobseeker's Allowance, *Labour Economics*, Vol. 16, No. 3, pp. 239-250.

⁸⁵ Petrolongo, B. (2009), The long-term effects of job search requirements: Evidence from the UK JSA Reform, ", *Journal of Public Economics*, Vol. 93, No. 11-12, pp. 1234-125.

⁸⁶ Wadsworth, J. (1990), Unemployment Benefits and Search Effort in the UK Labour Market, *Economica* 58, pages 17-34.

More recent literature tends to find negative impacts more often for the EU-15 also. One explanation could be that the quality of data or methodologies has improved; this seems the case for Sweden where the 2008 paper concludes a negative impact and the 2001 paper concludes a negative but not significant impact. A second explanation for the new results for EU-15 countries could be that social security has become less generous or more activating over time. If this is true, it is an indication that the Hungarian social insurance is not sufficiently activating since Hungarian studies show no significant negative impact of benefit levels on re-employment rates. One Hungarian study finds that higher benefit levels contain disincentives in particular for higher educated workers. This is in line with the Ecorys (2004) review that disincentive effects of higher benefit levels tend to be smaller for vulnerable groups.

Studies for Austria and Spain also address the impact of maximum benefit duration on unemployment duration, confirming that the maximum duration of unemployment also has a negative impact on re-employment probabilities. Once again, the evidence from Hungary is not unanimous with respect to the role of maximum benefit duration. The magnitude of the effects seems to be affected by the share of temporary lay-offs among the unemployed, who typically are not very responsive to variations in benefit schemes. Hence, the larger the share of temporary laid-off workers is, the smaller the measured impact of benefit schemes on unemployment duration.

Among the selected countries, studies on the impact of job search requirements were only found for the UK. Two papers from 2009 conclude that the introduction of the Job Seeker's Allowance in 1996, with stricter job search requirements, reduced the number of claimants by terminating benefits in the UK of those who could not prove sufficient job search, without incentivising increased job search, which was a secondary intended effect.

4.4.2 *Early Retirement (Italy, the Netherlands)*

Italy

Boeri and Brugiavini (2008) exploit variations in pension wealth of women in Italy after the Amato and Dini reforms of the early 1990s in order to analyse the individual retirement decision focusing on gender differences.

The authors borrow from the option value framework by Stock and Wise (1990) and model the retirement decision through a comparison of the expected value of retiring immediately with the expected value of continuing to work through a postponement of the retirement decision. Social security affects retirement decision through wealth and substitution effects. Higher social security wealth makes individuals consume more goods, including leisure and choosing to retire earlier. The substitution effect works in the opposite direction. An additional feature of social security is its peak value, i.e., the maximum difference in Social Security Wealth (SSW) between retiring at future ages and retiring today.

Using the Bank of Italy Survey of Household Income and Wealth (SHIW, a large cross-sectional dataset on individuals' socio-economic conditions made available every two years) for the years 1991, 1995, 1998, 2000 and 2002, the authors estimate a regression of the planned or actual retirement age on SSW, the peak value, a set of controls at the individual level (education, region of residence, industry dummies, occupation dummies, marital status) and age. SSW is the expected present discounted value of social security benefits available to the individual, calculated if retirement takes place at a certain year. The peak value is the incentive discussed above. SHIW data contains specific questions on the planned retirement age that is dependent on eligibility rules and the maximum value of retirement. Usually changes in SSW take place gradually; however, the analysed reform induces a discontinuity that can be exploited in the estimation. For example, the

1995 reform eliminated the advantage that women had over men with respect to the possibility of retiring earlier without actuarial penalization.

The probability of being retired is estimated to depend primarily on age, gender, education, the number of contribution years and employment status. Not surprisingly, older individuals and those with more contribution years are more likely to be retired. Women and low education workers are also more likely to be retired.

Under a natural experiment framework, the authors identify three groups of workers defined on the basis of their seniority:

1. Senior workers with more than 18 years contributions in 1995, not affected by the reform;
2. Mid-senior workers with less than 18 years of contributions who moved pro-quota into the new regime;
3. Junior workers who started to work in 1996 or later and fall under the new regime.

The authors find that the Amato-Dini reform delays the retirement decision as SSW decreases. Men are found more reactive than women to changes in rules, whereas women, having more gaps in their career, need to fill those gaps irrespective of the rules.

The authors conclude that the reform had the expected effect. As regards the policy implications derived from the analysis, policy makers need to internalize the difference by gender when inducing changes in the retirement schemes. The different dynamics in career patterns and the presence of gap years in the careers of women may induce differences in responses by gender, which are independent of the changes in retirement rules.

Angelini et al (2009) use SHARE data for the years 2006-2007 on 10 European countries and investigate how early retirement may produce financial hardship in later life. They argue that financially attractive early retirement schemes in a world where financial and insurance markets are imperfect can induce what they call an “early retirement trap” where retirees may run the risk of finding themselves in financial distress. This risk is found especially for Southern and Central European countries. As a policy implication, the authors argue that early retirement schemes should be abandoned in favour of helping retirees go back to work, with easier access to financial markets and insurance against health care problems.

The authors estimate financial hardship equations where the dependent variable is 1 if a household report financial difficulties. Regressors are household and individual characteristics (characteristics of head, age, gender, education, health, mobility problems, fluency and recall ability), and variables capturing wealth and social security as well as unused labour and financial capacity indicators. The starting sample comprises all households who are working or retired (excluding out of work) in Denmark, Belgium, France, Austria, Spain, Italy, the Netherlands, Sweden, Switzerland and Germany, with a total of 11,496 observations. These countries differ in their pension and welfare systems, in retirement age patterns and in households’ access to financial markets.

Identification is obtained by instrumenting unused financial capacity using risk aversion and financial literacy as instruments. Wealth is instrumented using the number of rooms in main residence, assuming that the latter is chosen earlier in life and once chosen does not change in response to shocks. Retirement status of head is instrumented using a variable on job-pension eligibility constructed by the authors using country specific early legislation by occupation, gender, year of retirement and number of years of contributions. Household social security wealth is instrumented by potential social security wealth based on legal retirement age.

Through a seemingly unrelated system of probit equations, the authors find that the probability of financial hardship is influenced by early retirement decision, in countries where early retirement is attractive. Austria, Belgium, France and Italy are relatively generous compared to the other countries and display patterns of financial hardship more likely to occur later in retirement years. In addition, financial hardship is more likely for those individuals who have less access to financial markets.

As a policy conclusion, early retirement can be seen as a missed opportunity in diversification and should therefore not be promoted for workers who do not diversify their wealth (for example, those who mainly invest in housing and human capital only). Social security and pensions should be less generous in countries where retirement is common at young ages, with the objective of increasing retirement age. Furthermore, workers should be allowed to re-enter the labour market as a means to alleviate financial distress. A better interface with financial instruments should be advocated, by promoting competition among financial institutions, together with an increase in financial literacy with information provided by independent sources for elderly individuals. Finally, one important source of financial distress is the costs related to health which should therefore be mitigated by promoting long-term insurance schemes.

Brugiavini and Peracchi (2010) investigate an interesting relationship from a policy perspective, i.e. the relationship between the retirement patterns of the elderly and the unemployment rate of the young. Many commentators have advocated the retirement of elderly individuals in order to increase the employability of the young. This idea is based on the “lump of labour” assumption, according to which the stock of available jobs is fixed and therefore an increase in retirement would make vacant those positions that would otherwise not be available for younger workers. However, if one wants to empirically investigate this relationship, the main problem is that both unemployment rate of the young and labour force participation of the old are related through the business cycle, i.e., when unemployment of the young is low during expansions, labour market participation of the elderly is also higher.

The authors use quarterly data from the Italian Labour Force Survey and Bank of Italy SHIW data (see above). In order to solve the endogeneity problem they construct a variable that measures the “inducement to retire” by simulating social security benefits. This is constructed using the historical dataset from 1977 to 2002 and the prevailing legislation for each employment type, considering the set of eligibility rules. For each cohort the pattern in social security wealth is usually hump-shaped, i.e., there is a peak value at a certain eligible age after which it declines. The reforms of the 1990s induced a lower starting level for wealth and a peak that is reached at an older age. A yearly index of the incentives faced by different cohorts in a specific year can be obtained by aggregating the age-year values of social security wealth. This can then be aggregated across cohorts for a given year.

Another index can be constructed using a similar procedure on peak values that combines both wealth effects and the dynamic gains obtained from retiring later in life. Finally, the procedure results in a set of time series representing each index constructed under different assumptions.

The authors then estimate a set of OLS regressions of the unemployment or employment rate of the young on labour force participation or employment rate of the older workers plus a set of controls such as GDP, a dummy for change in compulsory education age, median wage, contractual wage, and percentage of people in school. The resulting evidence is that both employment rate of the young and labour force participation of the old are procyclical. In order to overcome endogeneity issues the regressions are then estimated using the incentives variables as main regressors. Here, the incentives for older workers are found to have no beneficial effects on

the unemployment rate of the young and the results are stable over different robustness tests. The results point to a picture that is actually the opposite of the “young-in-old-out” story which has often been advocated in the political debate. Rather than focusing on the retirement of the old, policy makers should therefore concentrate on measures aimed at expanding economic activity in order to increase the employability of the young. Furthermore, more comprehensive reforms of the labour market should be put forward, especially considering employment protection legislation which is now designed to induce unequal levels of protection across age groups and it is especially detrimental for new entrants and women.

The Netherlands

In the late 1970s and early 1980s, social partners in the Netherlands arranged second-pillar early retirement schemes which covered 90 per cent of the workers. They provided workers the opportunity to retire without loss of income compared to being employed, either before or after the legal retirement age. The system was collective, with companies paying contributions for the right to dismiss their relatively costly older workers without further financial consequences. Unemployment and disability were financially equivalent routes for early retirement. As a consequence, workers retired at the earliest possible age, as Euwals et al. (2005) show with their model estimates and with reference to earlier literature.

In the early 1990s and especially in 1998 the pay-as-you-go schemes (VUT in the Netherlands) were replaced with actuarially neutral pre-pension schemes, which imply a lower benefit level between the ages of 60-64 for every earlier year of retirement. Based on exit rates by gender and age in 1979, 1981 (before the VUT pensions) and in 1991, 1992, Berkhout et al. (1994) predicted that the employment rate at the age of 60-64 would increase by 37 percentage points after completely abolishing the VUT, despite an increase in disability (+9 percentage point) and unemployment (+3 percentage point). In reaction, between 1997 and 2004 the Dutch government made the routes of unemployment and disability costly to the employer, costing the equivalent of two or more years' wages.

The effects of actuarial neutrality through lower pension entitlements are a loss of pension wealth of roughly one year's salary and an increase in the average retirement age by 2 months according to Euwals et al. (2006) and De Hek and Van Erp (2009). Euwals et al. (2006) base this on mixed proportional hazard models for retirement behaviour of 2,937 individuals in 1989-2000, with actuarial reforms taking place between 1992 and 1999. De Hek and Van Erp base this on a lifetime savings and consumption model with parameters which they calibrated to reproduce this outcome, to show that the outcome is compatible with life-time decisions in the long term.

Nelissen (2001) held a survey among 600 respondents aged 40-64 who reported on income, assets and choices between different retirement ages under different conditions. This enabled him to disentangle effects of the early retirement benefit level (before the age of 65) and the accumulation of old-age pensions (after the age of 65) by early retirees. Nelissen used the survey outcomes to calculate pension wealth for various retirement decisions and estimated logit probabilities to fit the reported choices. Nelissen shows that the abolishment of continued accumulation of old-age pension entitlements by early retirees, when the VUT was replaced with pre-pensions, delays the early retirement date by 7-10 months with fixed early retirement benefits (VUT). If the abolishment of continued accumulation of old-age pensions (after age 65) by early retirees is combined with actuarially decreasing early retirement benefits when retiring at an earlier age (before age 65), the early retirement age increases by 11-12 months.

De Hek and Van Erp apply their calibrated lifetime savings and consumption model to a hypothetical reintroduction of the VUT and find that the early retirement age would decrease by 2 years and 2 months, resulting in a lower government balance of 23 billion Euros (4 per cent of GDP in 2009), because of income transfers and through reduced income tax revenues. The delay in the early retirement date is twice as high as Nelissen found based on empirical analysis. One reason why the effect on early retirement should be higher in 2009 than in 2000 is that old-age benefit levels were further reduced shortly after the 1990s, becoming based on average rather than final wage. This further increases incentives to postpone early retirement, although the postponement of 2 years and 2 months is more an educated guess than an econometric estimate.

In the VUT scheme the participation rate in the model of De Hek and Van Erp is roughly 2 percentage points higher at ages 55-59 because VUT entitlements do not apply if the worker leaves the labour market at that age, but participation decreases by 32 per cent at ages 60-64; both findings are in line with the findings of Berkhout et al. (1994). However, the participation rate below the age of 55 remains the same in their model and numerous authors have observed that fewer jobs of older workers did not go together with more jobs of younger workers at all.

Since the alternative routes into early retirement (unemployment and disability) were closed off and early retirement was made less attractive to the worker, the (early) retirement decision of the worker depends on the design of the combined pre-pension and old-age pension systems. The evaluations of the abolishment of continued accumulation of old-age pensions by early retirees make it clear that technical details of the pension system can have a huge impact on the early retirement decision. The reform of the VUT scheme into pre-pension schemes not only affects the early retirement behaviour but also has other repercussions on the economy which are discussed below.

The VUT system was a Pay-As-You-Go system, where the currently employed pay the benefits of the currently retired. A Pay-As-You-Go system placed an increasing burden on the work force in an ageing society. Pre-pension systems are individually capital-funded. A capital-funded system means that contributions are adjusted to meet both current and expected future obligations. In practice the capability of pension funds to meet future obligations varies most strongly from year to year due to fluctuating returns on investments. Thus, although a capital-funded system is more sustainable it is not necessarily more stable than a Pay-As-You-Go system. The instability of the capital-funded system is mitigated by conditional indexation which implies that the benefit level is less strictly guaranteed. The instability can be exacerbated by requirements to use the current interest rate. In times of crisis the central bank may lower the interest rate to stimulate the economy. This implies that future obligations are discounted less, and higher contributions are required to increase to cover the higher valued future obligations. These issues do not apply to a pure Pay-As-You-Go system because future obligations are not taken into account. The instability through higher contribution rates in times of crisis further increases wage costs and therefore the risk of unemployment in times of crisis. However, we found no evaluations of the effect of capital versus Pay-As-You-Go systems in the Netherlands.

Bonenkamp et al. (2010) compared capital-funded systems and private savings or defined contribution systems. With private savings or defined contribution systems, the level of the pension depends on savings and returns on investments, without any guarantee. Bonenkamp et al. show that compared to defined capital systems workers risk consuming 14 per cent less (6 per cent of lifetime age income) during their working life in case of low returns on investments (10 per cent quantile) in order to pay for the defined benefits of the older generation. However, they can expect to consume 10-19 per cent more (5-8 per cent of lifetime wage income) both before and after retirement at age 65. The reason is that pension funds can invest more in risky assets than private savings aiming for the same expected old-age benefit level. A pension fund that pays no more than

the defined benefit can use excess returns on investments on the capital of retired individuals to build up pensions for the current work force, whereas with private savings or in a defined contribution system, excess returns of retired persons are intended for the retired person. In the model of Bonenkamp et al., the money equivalent of the lifetime utility gain is 7 per cent of the wage sum. Bonenkamp et al. also note that their outcomes highly depend on the expected rate and the risk of returns on risky assets.

Depending on the design, a defined contribution system can be more instable than the defined capital system. In times of crisis, the contribution rates still need to go up to pay for the future pension of the current workforce and not just for the current pension of the retired workforce. Furthermore, the retired workforce bears the full risk of the returns on investment. To minimize this risk, the savings of retired persons should solely be placed in risk-free assets with lower expected returns. Indeed, at retirement age the pension fund with a defined contribution system takes stock of the pension wealth accumulated for this person to determine the level of an annuity (fixed-level benefit). Investing in risky assets until the legal retirement age in a defined contribution system, comes with the risk that people who become eligible for retirement in a time of crisis face the risk that half of their pension wealth is lost in that crisis, resulting in half the pension benefit level and the need to continue working to maintain living standards. Although none of these proposed and budding reforms on (early) retirement decisions have yet been evaluated, analyses of the financial impacts and calibrated models show that technical details of the pension system can have huge impacts.

Compared to the impact of the design of the whole pension system on the early retirement decision, savings and consumption, the impact of the design of early retirement schemes and incentives to work between 60-64 years of age is modest. For example, Euwals et al. (2009) calculate that a certain tax credit of 1,400 Euros at age 62 increasing to 2,700 Euros for the modal worker increases the participation rate in the 60-64 age group by 0.6 percentage point or equivalently 0.1 per cent of the whole labour force participation. They also note that similar results can be achieved through other tax credits that cost the same amount (0.3 billion Euros) without the implied subsidy of high educated older workers. Various studies quantify various reforms of the first-pillar pension systems but note that without corresponding reforms of the second-pillar pension system the impacts will be small. Also, various authors note that labour market reforms of the elderly are just as important for increasing the labour force participation of older workers as reforms of early retirement or unemployment benefit for older workers.

To conclude:

- Incentives to retire at the earliest possible age are extremely costly, and run into roughly one per cent of GDP per extra year of early retirement;
- The consequences for the old-age pension benefit level (after age 65) have a larger impact on the early retirement decision than the consequences for the early retirement benefit level (before age 65);
- Financial incentives have a modest impact on the early retirement decision: it takes a loss of pension wealth of 100,000 Euros for workers to postpone retirement by 5-12 months depending on the study;
- To increase employment of older workers, labour market reforms are as important as social security reforms;
- A defined benefit system (based on defined capital or fixed) increases welfare more than a Pay-As-You-Go system (unsustainable in an ageing society) or a defined contribution system or private savings (by an estimate of 7 per cent of lifetime wage sum). The reason is that pension funds can invest returns in excess of fixed benefits of the currently retired workers in risky

assets. In a defined contribution or private savings scheme workers run the risk of having to continue working after the legal retirement age to sustain their income.

Conclusions from variations across countries

Both in Italy as well as in the Netherlands, the available evidence clearly indicates that early retirement schemes provide strong incentives for older workers to leave the labour market earlier than otherwise. A rationale for early retirement could be to make jobs available to young workers. Gruber, Milligan and Wise (2009)⁸⁷ challenge this view on early retirement, or at least the effectiveness of early retirement in reducing youth unemployment. Studies for Italy and the Netherlands on this topic also indicate that early retirement schemes do not in turn provide employment options for young outsiders of the same magnitude. This makes early retirement programmes extremely costly.

4.4.3 Labour Market Services (Austria, The Netherlands, UK)

Austria

In Austria, active labour market policies may be implemented by the Public Employment Service (Arbeitsmarktservice, AMS) directly or by commissioning a third party (Hofer and Weber, 2006). Active measures aim to improve skills, re-train the unemployed and improve the matching between job seekers and vacant positions. Training programmes are formal training programmes, job search assistance, job market orientation and integration programmes. Formal training programmes are vocational training courses that result in a certified qualification, such as completion of apprenticeship training, or that provide specific skills, such as languages or computer skills. Course durations are from 4 weeks to one year. For a detailed description of instruments and their evolution over the past decades, see Jandl-Gartner et al. (2010). Most available studies on labour market services in Austria are merely descriptive and document the number and durations of the unemployed who were administered by the AMS. Lutz, Mahringer and Pöschl (2005) provide a comprehensive overview on the aims and methods of labour market services in Austria.

Weber and Hofer (2003) evaluate a job search assistance programme by investigating the exit rate into employment of those who became unemployed in 1999. The main target group of this programme were freshly unemployed or long-term unemployed, who recently had successfully finished a measure targeted at improving their employability. The job search program was introduced in 1999 and was aimed at having each participant enrolled in a course within the first four months of unemployment or after completion of a previous measure. These courses provided job application training, such as how to write application letters or preparing for job interviews. Weber and Hofer employ a timing-of-events strategy based on Abbring and van den Berg (2003) and estimate that active job search programmes lead to increased transitions from unemployment to employment. Participation in a training programme reduces the transition rate from unemployment to employment by 12 per cent, which is the combined effect of the lock-in of the programme and the skills acquired through the programme. Overall, they find strong positive effects of participation in an active job search programme, in particular for women. Their estimates indicate a 67 per cent higher hazard of obtaining employment due to participation in a job search programme.

Weber and Hofer (2004) investigate an early intervention, "job-coaching", a part-time programme that complements standard job search. The target group of this programme consisted of long-term unemployed and individuals with physical or psychological impairments. The authors model the

⁸⁷ Gruber, J., K. Milligan, D.A. Wise (2009), *Social Security Programs and Retirement Around the World: The Relationship to Youth Unemployment, Introduction and Summary*, NBER Working Paper 14647.

transition from unemployment into employment by means of a timing-of-events strategy. They estimate that participation in job coaching led to significantly shorter unemployment durations. The positive effect of programme participation is relatively constant for the first year of unemployment, but is significantly lower for longer unemployment. Residual unemployment durations are about 30 per cent lower for programme participation in the first year.

Based on a propensity score approach, Lutz, Mahringer and Pöschl (2005) estimate the treatment effects of nine different instruments in Austria, which allows for a relative comparison of effectiveness. One of these instruments is assisted job search, the same type of programme analysed in Weber and Hofer (2003). While Weber and Hofer do not find gender specific effects, the study of Lutz, Mahringer and Pöschl (2005) does. They report some positive effects of treatment for women, but none for men. They also investigate the effects of job orientation programmes and find that women had more employment and fewer unemployment days after participating than women who did not participate. Again, no differences in the number of days employed or unemployed could be found for men between those who participated in job search assistance and those who did not. Other effects are even negative due to the lock-in effect of the typically longer programmes. The strongest positive effect occurs for wage subsidies. For women, their impact is eight to ten times stronger than the effect of job search assistance.

Based on their results, Lutz; Mahringer and Pöschl (2005) provide a comparison of direct costs of the programmes and the social security contributions generated from employment of the participants. They conclude that although the estimated effects of assisted job search are minor, the generated contributions to social security outweigh the costs.

Both the timing-of-events approach used by Weber and Hofer (2003, 2004) and the propensity score matching used by Lutz et al. (2005) require assumptions to identify the effect of programme participation on subsequent labour market outcomes. The timing-of-events approach requires that advance notification of programme participation is not relevant for job search behaviour in order to ensure that the hazard of finding a job is influenced only after the start of the programme. The propensity score matching approach requires that the selection into the programme is correctly modelled, i.e., programme participation is not influenced by unobserved variables, which are correlated with the outcome, such as the case worker's skills in allocating programme participants according to an advance judgement of a beneficial outcome. Violations of this *Conditional Independence Assumption*, CIA, result in a measurement error of programme impact. The assumption that advance notification of programme participation is irrelevant is perhaps more plausible than the CIA.

To summarize, the provision of job search assistance has a positive impact on job search. It remains undecided whether there is a gender specific effect as reported by Lutz et al. (2005). Even if women did benefit stronger than men, this would point to a missing link. Why would men benefit less than women from job search assistance? Do men typically search harder than women so that the provision of information does not add to their job finding prospects? Do men benefit more from alternative job finding channels than women? If these questions could be answered, job search assistance could focus more appropriately on different types of job searchers.

The results do not allow for an assessment of aggregate effects. As described in the methodological notes, the overall effect could be zero despite positive treatment effects on the treated, if labour market services simply redistribute job finding prospects.

The Netherlands

The traditional tasks of employment services include job information services, job counselling, job search assistance and the administration of active and passive labour market policies. In the Netherlands, the first three tasks are managed by public employment services. Both active and passive labour market policies are administrated by the social security institute for those with a social security benefit, and by municipalities for those with a social assistance income support.

The administration of the Dutch employment services was reformed completely in the late 1990s. One of the two main reforms of the public employment services in the Netherlands is the gradual transfer of active labour market policies from the public employment services to the social security funds and the municipalities between 1996 and 2002. This means that the administration of active and passive labour market policies is placed in the same institution. Blank et al. (2006) and CPB (2008) find that the costs per beneficiary decreased by 19 per cent and 16 per cent respectively between 2002 and 2004. The larger part was attributed to the increasing number of beneficiaries, and 5 per cent and 3 per cent respectively to the reform. The savings in administration costs were much less than expected and the implication is that who does the administration is not a key factor of costs.

The other main administrative reform was the requirement of outsourcing active labour market policies between 1996 and 2002. Politicians were aware of the risk of cream-skimming (receiving a budget for activating a parcel of beneficiaries and offering trajectories to those with good job prospects only to receive the placement bonus under no-cure no-pay contracts) and of parking (continuing a programme for those unsuccessful in finding a job in order to receive a budget for continued activation under other contracts). However, Koning (2009) found no evidence of cream-skimming or parking for programmes for unemployment beneficiaries. The authors explain this by the short leeway give to service providers, i.e., only a few weeks between signing the contract and placing the unemployed. They conclude there is no difference in cost-effectiveness between programmes carried out in-house and contracted services with private providers, and there is no difference in cost-effectiveness between no-cure no-pay contracts and no-cure less-pay contracts.

A specific administrative procedure that plays a central role in the Dutch public employment services is profiling. Profiling refers to the classification of individual job seekers into one of four Streams indicating different probabilities of finding a job without help. To illustrate the impact of profiling, we consider a classification into low, average and high probabilities of finding a job; the fourth Stream refers to people with a negligible chance of finding a job. For newly unemployment workers we assume that profiling classifies job seekers as having a 25 per cent, 50 per cent (=observed average) or 75 per cent probability of finding a job within six months, and for social assistance beneficiaries we assume that profiling classifies job seekers as having a 15 per cent, 18 per cent or 21 per cent probability of finding a job within six months.

We assume that depending on the outcome of profiling, job counselling is offered immediately or at a later stage if the job seeker has not yet found a job. In practice, different kinds of programme may be offered, but this section has studied the effectiveness of job counselling only (Van der Heul, 2006: +5 percentage points additional jobs for unemployment beneficiaries in two years, De Graaf-Zijl et al., 2006: +15 percentage points for social assistance beneficiaries in two years). Beyond the first two years, we apply the re-employment rates found by Leuvensteijn and Koning (2000). The programme costs are the observed average of 4,000 Euros (Koning, 2009).

Table 4.7 contains an overview of the costs of expected benefits without extensive job counselling and of benefits plus programme costs for extensive job counselling starting after 0, 6 and 12 months.

Table 4.7 Costs of expected income support plus costs of programme if offered, tabulated by month of program start and profiled Stream (probability of finding a job without help in 6 months)

	Unemployment benefit			Social assistance		
	Profiled Stream			Profiled Stream		
	Low (25% in month 0-6)	Avg (50% in month 0-6)	High (75% in month 0-6)	Low (15% in month 0-6)	Avg (18% in month 0-6)	High (21% in month 0-6)
No program	55.940	31.632	18.936	59.227	55.425	51.810
Programme, starts after...						
0 months	53.623	31.832	20.432	44.484	42.792	40.019
6 months	53.992	31.184	18.916	46.541	44.699	41.850
12 months	54.581	31.260	18.839	48.871	46.578	43.646
Difference ^{a)}	2.317	448	97	14.742	12.632	11.792

The difference in expected cost between no program and the lowest cost of a program, depending on how long after the start of the unemployment spell the program starts.

From the table, it can be deduced that extensive job counselling should not be offered too early to job seekers who are judged to likely find a job without help in the first six months, because the programme involves costs with a strong deadweight effect. A programme offered to job seekers with 75 per cent probability of finding a job without help in the first six months costs 20,432 inclusive expected benefits if offered at once, but costs are only 18,839 per newly unemployed job seeker if the programme is offered after 12 months. For job seekers with a probability of 25 per cent or less of finding a job without help in the first six months, the programme should be offered at once, because the deadweight loss is small and employment take-up becomes less likely the longer job seekers are unemployed.

As regards counselling, there are three relevant evaluation studies. In all three studies, the probability of finding a job is compared with and without counselling. There are other studies on the effectiveness of counselling but they are qualitative, refer to the studies reviewed here for estimates of effectiveness or are repeat studies by the same authors producing similar results.

Van der Heul (2006) compared job probabilities of newly unemployed in 2002 and 2003 using a combination of econometric techniques: matching, controlling for the trajectory selection effect and controlling for observable characteristics in the econometric model. Counselling is one among several of the trajectories that may be offered to unemployed. The study analyses each of these trajectories, but we restrict ourselves here to counselling as a main PES activity. The reference person with average characteristics has a 74 per cent probability of finding a job within the first two years after the start of unemployment. This probability is then compared to different groups via the econometric techniques described above.

Van der Heul notes that there is a time lag between nominating a job seeker for a trajectory and the actual intake for a trajectory. The trajectory that will be offered is decided during the intake. The mere nomination for a trajectory increased the probability of finding a job in the two years since the start of unemployment by 26 percentage points. An intake takes place for 84 per cent of those nominated. The actual intake for trajectory decreases the probability of finding a job by 25 percentage points which can be interpreted as the lock-in effect. The 1 percentage point difference between the nomination effect (+26 per cent) and the intake effect (-25 per cent) is significant and points to increased job search efforts after nomination for a trajectory.

Counselling is offered to 58 per cent of the job seekers at the intake. Counselling refers to anything from referring to jobs to intensive job search coaching. Van der Heul finds that counselling increases the job placement rate by +5 percentage points. To put this effect in perspective of results for other trajectories in the same study, diagnosis (occupational capability assessment) and social skills training both have a negative impact on the job placement rate of -7 percentage points and -6 percentage points respectively. Training has an insignificant impact on the job placement rate. The average net effect of any type of trajectory (counselling or otherwise) is between +1 per cent and +2 per cent but is insignificant.

As a control for the business cycle, the analysis was repeated for the inflow of 2002 (unemployment rate 2.3 per cent) and 2003 (unemployment rate 3.4 per cent). The difference between job finders among those nominated and those having an intake interview was -6 percentage points in 2002 and +5 percentage points 2003. Van der Heul explains the negative difference in 2002 as the result of a lock-in effect of trajectories. In 2002, whilst there were still many jobs, many of those participating in a trajectory could have found a job while in 2003, after the end of the programme, the labour market situation had deteriorated. This negative lock-in effect in 2002 was offset by a +6 percentage point effect of counselling on the probability of finding a job. For reference: for the other types of trajectories the negative lock-in effect of the trajectory was exacerbated by negative trajectory effects. In 2003 the effect of counselling was an additional +1 percentage point on top of the average trajectory effect of +5 percentage points. The conclusion is that counselling is effective in times of low unemployment when many jobs are available, but ineffective when fewer jobs become available.

The effect of counselling for different target groups is shown in the table below; counselling is especially effective for women and ethnic minorities.

Target group	Age 50+	Low educated	High educated	Ethnic min.	Women
Effect	+6%	+4%	+3%	+9%	+9%

De Graaf-Zijl et al. (2006) estimate hazard rates for exits to jobs for social assistance beneficiaries in various trajectories in 2002 and 2003, with dummy indicators for participation in various trajectories and characteristics of individuals as control variables. They find that counselling increases the probability of the reference person finding a job within two years after the start of the social assistance benefit from 18 per cent to 33 per cent. This +15 per cent effect on the probability of a job in two years for social assistance beneficiaries is much higher than the +5 per cent found for unemployment beneficiaries by Van der Heul (2006).

The effects of De Graaf-Zijl et al. (2006) may be overestimated, since there is no control for the timing of effects such as in Van der Heul. Another study that will be discussed below, notes that taking account of the timing of effects reduced the estimated overall effect. This is because an effect in the second year only applies to those who did not yet find a job. A small or negative effect in the first year and a positive effect in the second year, as Van der Heul finds for unemployment beneficiaries, results in an average of both effects in the hazard rate, while the positive effect in the second year only pertains to the fraction who did not yet find a job. In this light it is insightful to compare their estimates for the unemployment beneficiaries in 2002-2003 with the estimates of Van der Heul. De Graaf-Zijl et al. find that any type of trajectory (which is not further differentiated) significantly increases the probability of the reference person finding a job in two years from 74 per cent to 79 per cent, whereas Van der Heul finds an insignificant increase of between 1 and 2 percentage points.

De Graaf-Zijl et al. also find that a combined package of assessment followed by training and then counselling is most effective, increasing the probability of finding a job within two years from 18 per cent to 56 per cent. Although the study does not comment much on this we can draw the conclusion from it. Since assessment only (increase to 24 per cent) and training only (increase to 21 per cent) are far less effective (but significant), this points to an important role of counselling to make assessment and training effective. However, since the package is only offered to a selective group, we do not think this warrants a conclusion that the package should be extended to the whole population of social assistance beneficiaries.

Van den Berg and Van der Klaauw (2006) analysed a controlled experiment that took place in 1998, namely the provision of a light version of counselling and monitoring to a select favourable group of unemployed job seekers. Since April 1998, public employment services were required to extend counselling and monitoring (C&M) to unemployed job seekers profiled as having a high chance of finding a job on their own (type-I). Before 1998 this group only had to be monitored. The controlled experiment took place in two cities where 394 type-I job seekers entering unemployment between August 24 and December 2 of 1998 were randomly assigned to C&M or monitoring only.

C&M had fixed costs of 152.46 Euros per beneficiary regardless of unemployment duration and was provided for six months. In addition, monitoring cost 17.52 Euros per beneficiary per month for checking benefit entitlement. This C&M must be seen as a light form of counselling, which is not comparable to counselling as a trajectory for which the beneficiary must be nominated.

Van den Berg and Van der Klaauw non-parametrically estimated the re-employment rate with a job search model and found similar outcomes. In both estimates, the job probability decreases significantly over time. In the first six months, the job probability is an insignificant 6 percentage points higher with C&M compared to monitoring only. This difference is equivalent to a reduced unemployment duration of one week.

Based on the 6 percentage points additional jobs in the first six months, the authors find that C&M is cost-effective after 20 weeks. It saves 56 Euros within the first six months (standard error 287 Euros) and 903 Euros (standard error 2,335 Euros) if the effect of counselling is assumed to persist after six months.

The experiment included a follow-up survey about job search. From the follow-up survey, the authors conclude that job seekers with C&M significantly substitute informal job search with formal job search without increasing overall job search intensity.

The authors conclude that monitoring is ineffective and are not conclusive about counselling. However, they point out that the experiment involves low-intensity C&M for job seekers with a high chance of finding a job on their own, and refer to literature which finds that C&M is more effective for groups with a lower chance of finding a job on their own.

Of the three studies on the effectiveness of counselling, two studies find 5 per cent or 6 per cent additional jobs in two years, which is significant in the Van der Heul study and insignificant in the Van den Berg study. The insignificance of the Van den Berg study might be explained by their small sample of two municipalities in one year. These outcomes are in line with headcounts by four municipalities which indicate job counselling for social assistance beneficiaries between 3 and 9 percentage points (Kok and Houkes, 2011). De Graaf-Zijl et al. find much larger effects for social assistance beneficiaries (+15% additional jobs in two years), but unlike the other two studies, they do not control for a lock-in effect which implies a negative effect in the first year and a positive effect in the second year. Since the effect of the first year applies to all participants and the effect of the

second year only to those still left, it stands to reason that controlling for the lock-in effect gives lower results. On the whole, we conclude that counselling points to roughly 5 per cent additional jobs in two years, that counselling is more effective for ethnic minorities and women, but that counselling is ineffective when unemployment is high.

The UK

Labour market services in the UK have been subject to numerous reforms and initiatives since the early 1990s. These activities have been systematically accompanied by targeted evaluation studies, which meanwhile have accumulated to a rich set of knowledge. All of the evaluations cited below are about programmes, policies or reforms introduced by the Department for Work and Pensions (DWP), and its predecessor departments which had responsibility for running welfare-to-work services (the Department for Education and Employment, the Department for Employment, and an agency of this department known as the Employment Service). Due to sometimes minor but frequent reforms, the regime affecting recipients of welfare benefits has been continually changing. In some cases, the evaluations cited below are of minor changes to the usual regime for unemployed people or for single parents receiving welfare benefits, and it is hard to think that these would be of great interest in other countries, as the nature of the reform is very specific to the overall regime affecting recipients of welfare benefits at the time of the reform in the UK.

Almost all the evaluations were commissioned by central government. It is very common practice within DWP and its predecessor departments to conduct some sort of evaluation of most major (and some minor) changes to policy, and often these evaluations attempt to estimate the additional impact of the policy on outcomes of interest (and these are the ones cited below). Of those cited below, some evaluations have used bespoke surveys of participants or the target population and a comparison group of some kind, but most have relied on administrative data. The outcomes investigated are often limited to “exits from welfare benefits” (or whether someone was claiming a welfare benefit X months after the intervention) but sometimes look at whether someone was in work. This limited scope reflects the core interest of the commissioning department and the fact that administrative data is readily available on whether someone is receiving benefits but no reliable administrative data is available on whether someone is in work (unreliable administrative data on whether someone is in work has been available to analysts only since approximately 2005), and administrative data, reliable or unreliable, on other outcomes is not available at all.

Throughout the early to mid 1990s, the UK experimented with intensive case worker/personal adviser support, initially for the long-term unemployed and youth unemployed. Pilots of these reforms suggested they led to faster exits from unemployment, and so these reforms were gradually rolled out, and their intensity increased, culminating in the introduction (under a Labour Party government) of the New Deal for Young People (NDYP) and the New Deal for 25+ and New Deal for 50+. The NDYP was targeted towards the young: after 6 months unemployed, 18-25 year-olds were mandated to participate in this programme which implied intensive job search assistance and basic training skills during 4 months. If a job was not found during this period, claimants were offered a subsidized job or full-time training/education. This model was then applied to other groups (25+, 50+, couples unemployed). These New Deals have also been evaluated, and the latest (pre-crisis) evidence on their net fiscal benefits to the Exchequer is shown below. A reform which sought to encourage the unemployed to find and then progress in work (the Employment, Retention and Advancement programme) by providing post-employment support and financial incentives to stay in work had disappointingly small impacts on the long-term unemployed.

Lone parents have become another target group for labour market services. In the UK, lone parents have traditionally faced a lax welfare system, with no requirement to look for work until the youngest child had left full-time (not further) education. The UK experimented with requiring lone parents to

attend periodic interviews at an employment office (known as Work Focused Interviews). These had minor impacts, as detailed below. The UK also introduced a voluntary programme for lone parents who wanted to work, with case-worker (personal adviser) support, and help in finding a job, training and childcare, known as the New Deal for Lone Parents. This programme has good outcomes but, because few lone parents opt to participate, its impact on exit rates amongst all lone parents on benefits is small. A reform which sought to encourage non-working lone parents to find and then progress in work (the Employment, Retention and Advancement programme) by providing post-employment support and financial incentives to stay in work had reasonably large effects on lone parents over and above NDLP services.

Possibly due to a rigorous unemployment benefit system, disability claims have evolved into an important form of out-of-work benefits in the UK. Disabled have therefore also gained increasing attention from labour market services. In the UK, individuals assessed to be incapable of work receive more generous out-of-work benefit than other non working individuals; this difference has become even larger after the 1996 introduction of the less generous Job Seeker's Allowance. The main income transfer targeting disabled or temporarily incapacitated individuals was Incapacity Benefit (IB) - recently renamed Employment Support Allowance (ESA). In 2003 a major programme called Pathways to Work was experimented in some parts of the UK. It was aimed at increasing the likelihood of IB recipients returning to work by providing increased conditionality (mandatory work focused interviews), financial incentives (return-to-work credit) and voluntary programmes targeted at individuals with disabilities. The programme was evaluated in pilot areas on the flow of new IB claimants during the 2003-2005 period leading to significant impact estimates on both the exit out of benefit and the return to employment (see below for details). The impact on exit out of IB mostly concerned claimants who would have left IB in less than a year in the absence of the programme while the impact on employment seems to have been more long lasting. Most of the positive employment impact seems to have come from individuals (mostly married women) returning to work after a spell of incapacity when they would not have returned to the labour force in the absence of the programme. A comprehensive cost benefit analysis was carried out by Adam et al. (2008) using evidence from the impact analysis, a complete estimation of costs and a full-fledged micro-simulation model in order to estimate the net cost of the programme to the Exchequer and the individuals. The overall results depend on assumptions about the duration of impact after the last survey was carried out. Table 6.1 of Adam et al. (2008) is reproduced below, It shows two estimations of costs and benefits with a conservative 70 weeks impact (about the time when the last survey was made) and with a longer impact of 150 weeks.

Table 4.8 Present value in GBP of total measured financial benefits per incapacity benefits enquiry

Duration of impact	Individual	Exchequer			Society		
	Benefit	Gross Benefit	Cost	Net Benefit	Gross Benefit	Cost	Net Benefit
70 weeks	£526	£515	£340	£175	£1,041	£340	£701
150 weeks	£935	£1,088	£340	£748	£2,023	£340	£1,683

Source: Adam et al. (2008) [16].

Net benefit to the Exchequer is positive even with the conservative assumption, contrary to the estimates provided by the National Audit Office (see Table 4.9 below). Given that the methodology used by the NAO is not available and that the one used by Adam et al. (2008) seems the best possible given data availability we consider the estimates in Table 4.8 more reliable than Table 4.9 which is therefore not further discussed.

Table 4.9 Summary of cost-effectiveness of various labour market services

Programme	Job entry rate	Additional jobs	additional jobs in % point of the number of participants	Cost per additional job (including administrative costs) (£)	Net benefit to Exchequer per participant (£)
<i>New Deal for Lone Parents</i>	43	15,684	7%	4,950	-40
<i>New Deal for Partners</i>	48	61	1%	76,450	-1,100
<i>New Deal 25 Plus</i>	28	10,324	8%	12,180	-360
<i>New Deal for Young People</i>	33	17,457	7%	11,720	-390
<i>New Deal 50 Plus</i>	31	2,263	4%	3,620	50
<i>New Deal for Disabled People</i>	48	11,064	17%	6,780	1,260
<i>Pathways to Work</i>	29	3,441	9%	9,910	-100
<i>Employment Zones – NDLP</i>	32	597	5%	23,250	-1,020
<i>Employment Zones – ND 25+</i>	25	1,998	7%	18,810	-800
<i>Employment Zones- NDYP</i>	30	752	7%	21,360	-1,010

Taken from Figure 21 in National Audit Office (2007), *Helping people from workless households into work*, HC609 (2006-2007 session), London: The Stationery Office. All numbers relate to 2005/6.

In the early 2000s, the government brought together responsibility for policy-making in the areas of welfare benefits and welfare-to-work programmes (into the new DWP), and combined them in the eyes of claimants by creating a new agency, Jobcentre Plus, which would run offices where claimants would go to discuss which benefits to claim but also to take part in job-finding activities. However, evaluations of the forerunner of this reform (the forerunner was called ONE) found no effect on key outcomes.

Conclusions from variations across countries

The notion of PES is quite different between countries. In countries like the UK, PES comprise the whole set of activation policies for job seekers, including training, wage subsidies and the like besides a more narrow focus on job search counselling, and monitoring. In these countries, counselling and job search assistance are often combined with other measures, which sometimes makes it difficult to disentangle the specific contribution of each policy instrument to the overall effect of activation. Austria and also Germany follow the more restricted notion of the tasks of PES, which is also behind the definition of PES in this report. The Netherlands is somewhere in between.

Counselling appears to be effective, but not in general. If positive effects occur, they seem to be small. However, as the Austrian example shows, they may still be highly cost-efficient, because job search assistance measures incur little cost.

4.4.4 Training (Germany, Ireland)

Germany

Further education and training measures (FET) aimed at improving the labour market skills of the unemployed constitute an integral part of the ALMP schemes in Germany. In place since the late 1960s, they were used particularly extensively following the reunification to retrain unemployed East Germans for their integration into the joint labour market. Being predominantly funded by the federal employment agency (Bundesagentur für Arbeit, BA) and regulated within the statutory framework of the social security act (SGB III and SGB II) today, FET measures were subject to several regulatory reforms over time. Following the introduction of the SGB III in 1998 “Further

Education and Retraining” (FuU) measures became measures for the “Advancement of Further Occupational Training” (FbW); however, this entailed only minor differences in the implementation practice. The most important changes occurred in 2003, in the wake of the “Hartz-reforms”, with the introduction of training vouchers (Bildungsgutschein), whereby the unemployed were able to choose their training provider autonomously. Besides trying to induce a more active participation of the unemployed, the voucher system also intended to increase competition amongst providers of training schemes, as individual choice was more likely to identify ineffective courses – and thereby improve the average training quality. Following “Hartz”, the average duration of FET was also reduced significantly, aiming to minimize the detrimental lock-in effects observed in evaluation studies. Since 2005, the SGB II covers regulations for individuals in long-term unemployment or on social assistance, thereby containing FbW distinctly from the SGB III.

The types of FET in place during the respective regulatory periods cover a wide range of instruments and may therefore vary greatly in their degree of specificity, their practical orientation and their duration. Aimed at improving the match between supply and demand of labour market skills, the type of training provided can, for example, either contribute to complementing the set of skills an individual requires, or to retraining individuals completely in a new professional area. Depending on individual prerequisites, FET might thereby comprise participation in purely practical in-company training or purely school-based courses, or consist of alternating company-school training. An important part of FET is also aimed at the final acquisition of a certified occupational or schooling degree, to improve the signalling ability of individuals. Depending on the type, the duration of the intervention might vary substantially from several weeks to several years.

Detailed administrative data sources that became available during the beginning of the first decade of the 21st century allowed for a distinct identification of individual participation in the different instruments and triggered an abundance of ex-post evaluation studies, examining the effectiveness of the respective measures in place. As all instruments are aimed at integrating unemployed into the first labour market, the outcome variable of interest is usually given by the probability of being in employment at a certain point in time, or by the exit rate out of unemployment. Given the peculiarities of the East and West German labour markets, the analyses are often conducted separately for the two regions.

The first studies exploiting the administrative data source, investigate the effect of participation in specific professional skills and techniques (SPST) versus non-participation for unemployment entries between 1992/1993 and 1994.⁸⁸ The overall findings of the analyses are rather similar, however, suggesting that participation in SPST significantly improves the long-run employment effects of individuals by about 10 to 20 percentage points. Allowing for heterogeneous programme effects, by the timing of entry into SPST in the course of unemployment,⁸⁹ the studies find that earlier training entry entails higher lock-in during participation, but exhibits higher returns to participation later on in terms of long-term unemployment effects. A comparison of the effectiveness of measures for East and West German participants⁹⁰ finds a higher return to participation in West Germany in the long run, but a stronger lock-in effect during participation in East Germany. This points to a more positive selection of individuals for training in East Germany, increasing the opportunity costs of programme participation, but to a lower return to education after the end of the programme. Note that the differential characteristics of programme participants in East and West Germany impede a straightforward assessment of the return to human capital increase under differential economic conditions.

⁸⁸ Compare studies 6, 9, 11, 14 and 15.

⁸⁹ Compare studies 5, 10.

⁹⁰ Compare study 10.

The rather homogenous institutional setting before 1998 furthermore allowed for an investigation of a heterogeneous performance of SPST under different economic conditions.⁹¹ It was found that the employment effect of participation increases with the unemployment level at the point of entry into the programme. This has potentially caused a reduced lock-in effect during programme participation in periods of low labour demand. If negative lock-in is a bad signal in the labour market during an economic upturn, it might dampen the programme impact later on; however, if individuals enter the programme under poor economic conditions, this persistency of the lock-in effect might be lower or even absent.

Due to the continuous improvement of the administrative data in terms of a more differentiated tracking of individuals after their unemployment exit, and by now being able to better distinguish different types of FET, a second wave of evaluations followed, focusing on programme entries between 1999 and the end of 2002. Although potentially more reliable in their ability to identify the true programme impact, these studies bear the disadvantage of observing comparably short post-treatment periods.⁹² Besides looking at the general effectiveness of the measures, more differentiated questions regarding the optimal duration of training, cost-benefit considerations and the heterogeneity of the programme impact could now be analysed.

Overall, this second cohort of studies paints a less favourable picture of programme effectiveness, which is partially due to the reduced post-treatment observation period, but this cannot explain it all. Although the studies confirm that training significantly improves the employment probability of participants in the long run, the costs of being locked in the programme in the short to medium term becomes more important. In particular, the majority of studies observe significant negative lock-in effects that fade out to zero only about two to three years after programme entry. Comparing these more recent findings with the results of the first evaluation cohort, it is found that lock-in effects increased in volume, despite the overall shorter programme duration and the more adverse characteristics of programme participants. This can only be partially explained by the low economic conditions during the first decade of the 21st century, but suggests more structural changes in the functioning of the labour market that penalize unemployment periods more heavily, or in the selection process of individuals into the programme. The conclusion that can be drawn from this is to avoid programme entry early on in the unemployment spell when the probability of leaving unemployment is high, and restrict treatment to individuals with more adverse labour market characteristics as they are less affected by the lock-in effect. Although it is found that locking in might serve as a measure to keep individuals in the labour force in East Germany, they are better placed in measures aimed at overcoming barriers on the demand side, for example training or employment incentives.

Furthermore, the evidence suggests that reducing the average programme duration might be beneficial, as long-term FET do not perform better than short-term FET in integrating individuals in the labour market. However, the question whether practically oriented or school-based measures perform better remains somewhat in the dark. Whereas some studies find no difference in their effectiveness, another study finds only positive effects for participants in school-based training, which could be explained by their relatively higher signalling ability. A comparison of the relative performance of several types of training programmes shows that medium-term FET aimed at increasing the profession-specific human capital endowment of individuals fares better than short-term classroom training conveying general sets of skills in the long run. Finally, there is only little evidence of effect heterogeneity by level of pre-treatment characteristics and gender.

⁹¹ Compare study 8.

⁹² Compare studies 1, 2, 3, 4, 6, 7, 12, 15 and 16.

The previous results show that a valid analysis of the treatment impact of FET can only be done several years after its implementation so as to ensure a sufficiently large post-treatment observation window. The latest set of programme evaluations concentrates on the impact of FET after the Hartz reforms, including programme entries between late 2002 and 2004.⁹³ A direct comparison of the programme impact for participants before and after the reforms shows an overall increase in programme effectiveness, which can be partially related to the average reduction in programme duration and thus of the lock-in effect. The finding that even long-term measures perform better, however, is suggested to be caused by the increase in programme efficiency due to the introduction of the training vouchers.

Ireland

In comparison to other European countries, research on the effectiveness of training programmes in Ireland is quite limited. In general, the available evidence has found that training programmes with strong linkages to the labour market, as opposed to general training, are the most effective. The studies that do exist are summarized below.

Breen (1991) undertook one of the first evaluations of training programmes in Ireland. In particular, he examined the effectiveness of state-provided training programmes on young peoples' employment prospects in the mid-1980s.⁹⁴ The evaluation was based on a cohort of young people who left full-time post-primary education in 1981-1982 and then entered the labour market. This group of school leavers was subsequently interviewed in May-June 1983, and again in November 1984 and December 1987/January 1988. Breen (1991) assessed both the short-term⁹⁵ and long-term⁹⁶ effectiveness of state-sponsored training courses, of maximum six month duration⁹⁷, on young peoples' probability of acquiring a job. In terms of the short run, Breen (1991) found that participation in a state-provided training course increased a participant's chances of finding a job by 16.5 percentage points as compared to a control group that consisted of those that continued to be unemployed.⁹⁸ In the long run, training was not found to have a significant impact on a participant's likelihood of being employed.⁹⁹

O'Connell and McGinnity (1997) also investigated the effectiveness of training programmes on young¹⁰⁰ unemployed individuals' employment prospects. This analysis was carried out in the mid-1990s, using a combination of post-programme survey¹⁰¹ and school leaver survey data, and it distinguished between general training and specific skills training.¹⁰² As with Breen (1991), O'Connell and McGinnity (1997) examined the short-term and long-term impacts¹⁰³ of both types of

⁹³ Compare studies 6 and 17 and 18.

⁹⁴ The programmes evaluated were introduced during the 1970s and early 1980s to deal with the rise in unemployment that took place during that time period.

⁹⁵ Probability of finding a job immediately after programme participation.

⁹⁶ Probability of being in a job just under one year after participation ended.

⁹⁷ Non-apprenticeship training programmes.

⁹⁸ Participants who did not complete their training programme are included in the analysis.

⁹⁹ Results were found to be robust to the effects of possible omitted variables and selection bias.

¹⁰⁰ Aged 22 or under.

¹⁰¹ Post-Programme Follow-up Survey, which was commissioned by the Irish Department of Enterprise and Employment (now known as the Department of Jobs, Enterprise and Innovation) and the European Commission. The survey was based on unemployed individuals who had exited state-funded training courses between April and July 1992, and they were followed up in 1994, between 20 and 25 months after the training programmes ended.

¹⁰² The labour market outcomes of unemployed youths who participated in either general or specific training programmes were compared with a control group of individuals who did not participate in such schemes. This control group was derived from the school leaver survey data, and the criteria for selection were that individuals had left school between 1990 and 1992, were unemployed and in the labour market at the same time as trainees were exiting programmes, and had not participated in training courses themselves. As with the treatment group, the comparison group was also interviewed in mid-1994.

¹⁰³ The short-term is defined as employment within two months of leaving a programme, and the long-term is employment at 18 months post programme participation.

training. The authors found that, relative to a control group of similar unemployed individuals who did not participate in training, participants in both types of training were more likely to be employed in the short term, a result that is similar to that found by Breen (1991). However, participants in skills training had better employment prospects than those in general training. In relation to the long term, only participants in skills training had higher employment prospects. All results were found to be robust to the effects of possible omitted variables and selection bias. O'Connell and McGinnity (1997) presented predicted probabilities of employment for both types of training.¹⁰⁴ In terms of the short term, the probability of employment was estimated to be 0.16 for general training and 0.32 for specific training. In the long run, participation in a specific skills training programme increased an unemployed young person's employment chances by 14 percentage points. O'Connell and McGinnity (1997) concluded that programmes with a strong orientation to the labour market were more effective than programmes with weak linkages to the labour market, i.e., general training.¹⁰⁵ Using the same data as O'Connell and McGinnity (1997), but a different methodology, Conniffe, Gash and O'Connell (2000) also examined the impact of general training¹⁰⁶ on unemployed individuals' employment prospects eighteen months after completion of the training programme. As with O'Connell and McGinnity (1997), Conniffe et al., (2000) found that such training did not improve an individual's prospect of gaining employment. This result was found to be robust to selection bias.

Denny, Harmon and O'Connell (2000) used data from the 1996 FÁS Follow-up Survey¹⁰⁷ and the 1994 and 1995 waves of the Living in Ireland Survey¹⁰⁸ to assess the impact of a range of state-sponsored training programmes on participants' employment prospects two years after completing a programme. Of the training programmes examined, Specific Skills Training and Job Training were found to be the most effective: the objective of both of these programmes is to provide unemployed workers with vocational training at skilled worker level to meet the identified skill needs required by industry. Denny et al., (2000) found that Job Training increased participants' probability of employment by 32 per cent, while Specific Skills Training increased employment chances by 30 per cent.¹⁰⁹ When Denny et al., (2000) focused on full-time employment only the effects for the two training programmes fell to 29 and 25 per cent respectively. Enterprise Training, a training course designed to provide support to new business start-ups, was also found to increase the probability of full-time employment for participants two years after the programme ended (17 per cent); however, the effect of this programme was at the margins of statistical significance.¹¹⁰ Using a series of interaction terms, Denny et al., (2000) tested for differences in programme effectiveness by gender, age and unemployment duration but found no evidence of any difference in programme effects for each of the sub-groups examined.¹¹¹ Drawing on the same data as Denny et al., (2000), but

¹⁰⁴ The model predictions are based on a male, at a mean age of 18.7 years, with no qualifications, who had been unemployed for 4 months.

¹⁰⁵ O'Connell and McGinnity (1997) also investigated the impact of training on income and found that specific skills training had a positive and significant effect on participants' income, but there was no evidence of any effect from general training.

¹⁰⁶ The general training programmes investigated provided instruction in a range of basic skills and were mainly intended for people with relatively poor educational qualifications.

¹⁰⁷ Post active labour market programme survey, which interviewed individuals that participated in fourteen training and temporary employment schemes: the individuals left their course/scheme between April and July 1994 and were interviewed approximately two years later (January to June 1996).

¹⁰⁸ The Living in Ireland Survey is a panel dataset that contains a wide range of information about labour market activities, among other things, for a nationally representative sample of households: the comparison group of non-participants was drawn from this dataset.

¹⁰⁹ The employment effects of two additional training programmes – Return to Work and Skills Foundation – were positive (23 and 19 per cent respectively) but at the margins of significance ($p < .10$).

¹¹⁰ $p < .10$.

¹¹¹ In addition to investigating participants' employment prospects two years post programme completion, Denny et al., (2000) also analysed the wage effects of programmes. Only Specific Skills Training was found to increase wages: increased participants' wages by 17.2 per cent compared to non-participants (this investigation was based on those that were working full-time in 1996, and the result was found to be robust to sample selection bias).

focusing on a narrower range of training programmes, O'Connell (2002) derived similar results to Denny et al., (2000). Specifically, O'Connell (2002) found that Specific Skills Training increased a participant's employment chances by 30 percentage points, while General Training had a more modest impact, increasing a participant's employment prospects by 9 percentage points. Both Denny et al., (2000) and O'Connell (2002) results were robust to sample selection bias.

Using similar data sources as Denny et al. (2000), Fitzpatrick Associates and the Economic and Social Research Institute (2003) undertook an evaluation of state-sponsored training programmes provided to unemployed workers in Ireland in 1999 and 2000: they specifically investigated the impact of programme participation on participants' probability of being employed one year after programme completion. As with Denny et al., (2000), Fitzpatrick Associates and the Economic and Social Research Institute (2003) found that both Job Training and Specific Skills Training had a statistically significant impact on employment prospects in the following year: Job Training increased participants' probability of employment by 32 per cent for both 1999 and 2000 programme participants, while Specific Skills Training increased employment chances by 27 per cent for the 1999 programme cohort and 21 per cent for the 2000 programme cohort. Other training programmes that were found to have a statistically significant impact were as follows: i) Traineeships (35 per cent for the 1999 cohort and 31 per cent for 2000), ii) Linked Work Experience (23 per cent for the 1999 cohort and 29 per cent for 2000), iii) Community Youth Training (18 per cent for the 1999 cohort and 22 per cent for 2000) and iv) Alternance¹¹² (22 per cent for the 1999 cohort and 20 per cent for 2000), all of which are labour market orientated programmes. Fitzpatrick Associates and the Economic and Social Research Institute (2003) did not test for the effects of possible omitted variables and selection bias.

Using a combination of administrative and survey data, McGuinness, O'Connell, Kelly and Walsh (2011) have undertaken the most recent, and comprehensive, evaluation of state-sponsored training programmes in Ireland. Specifically, McGuinness et al., (2011) assessed the impact of training programmes provided by FÁS, the national training and employment authority, under the National Employment Action Plan (NEAP), Ireland's activation strategy, on a participant's probability of being unemployed 13 months following the commencement of the training programme. The evaluation, which is based on individuals who became unemployed between September and December 2006 and who were subsequently tracked up until June 2008, focuses on the short-run effects of training.¹¹³ Compared to a control group of unemployed individuals who were either referred to FÁS for Job Search Assistance or were referred and interviewed, unemployed individuals receiving FÁS training were found to be 11 per cent less likely to be unemployed in June 2008. This result was found to be robust to sample selection bias.

Based on the existing evaluation literature, the general conclusion is that the most effective training programmes in Ireland, in terms of improving the employment prospects of participants, are those with strong linkages to the labour market as opposed to those that provide general skills.

Conclusions from variations across countries

Training appears to have a positive impact on participants in Germany as well as in Ireland. The main problem arises from costly lock-in effects. The gain of employment prospects is therefore not necessarily paying off fiscally by higher employment rates.

¹¹² Return to work training programme.

¹¹³ The training courses provided by FÁS typically last less than six months.

4.4.5 Employment Incentives (Hungary, Italy, Spain)

Hungary

During the past 20 years, four main employment-incentive instruments were available in Hungary:

- Wage supplement to subsidize the employment of the long-term unemployed;
- Benefit to labour market entrants to support gaining experience;
- Benefit to labour market entrants;
- START programmes for school leavers and other disadvantaged groups providing social security contribution subsidy.

Studies attempting to evaluate impact and efficiency are available only for the first type of programme. This wage subsidy programme is targeted towards people who are long-term unemployed, which means job seekers who were previously unemployed for more than 6 months (3 months for school leavers). The subsidy consists of a phase of direct funding of part of the wage costs to the employer and a subsequent phase of the same length, for which the employer is required to commit to retain the worker without subsidy. The subsidy in the first phase may cover up to 50 per cent of the total labour cost (gross salary plus social security contributions) during the course of 6 to 12 months. The determination of the exact amount and duration of the subsidy within the above-mentioned range is at the discretion of the local job office of the National Employment Service where the application is filed and which subsequently establishes a contractual relationship with the employer. The intention behind the subsidy is to increase the employment prospects of long-term unemployed by compensating the employer for training costs that are necessary for lifting the productivity of the new employee to the required level. In order to qualify for the subsidy, the employer may not have laid off anyone involved in the same line of work within the previous six months. If workers hired through the subsidy are not retained after the subsidy phase, the employer must repay the provided subsidy to the Employment Fund.

The mean duration of subsidy payments in the year 2009 was 8.3 months, whilst the average programme cost per person was HUF 853,200 in the first half of the same year (Csoba et al, 2010). This second figure, when divided by the average duration translates into HUF102,800 per person per month which accounts for 52 per cent of the average gross salary for the period (HUF197,500). Taking the net amounts of the above figures, based on the 2009 tax code, the average net salary equals HUF121,300 and people with subsidized employment earn on average a net salary of HUF78,100 sourced directly from the subsidy. This net HUF78,100 slightly exceeds the minimum wage (HUF71,500 in 2009) and consequently is well above the typical unemployment benefit ranging from 60 per cent to 120 per cent of the minimum wage (HUF 42,900 – HUF 85,800), skewed heavily towards the lower limit.

Starting in 2005, differently funded wage subsidy programmes were merged and the more generous START programme was initiated. The maximum subsidy was increased to 100 per cent of the wage bill. This led to a decline of “classical” wage subsidies and an increase of participation in START. In 2007, the START Extra and Plusz programmes were initiated, which provide a subsidy to social security contributions to support the re-employment of specific disadvantaged groups. The increase of take-up in these programmes and the decrease in that of the former wage subsidy suggests that companies might have switched to the new subsidy. Unfortunately, however, data on Start Plusz and Start Extra uptake is not public and therefore it is currently impossible to quantify the shift in participation in exact figures.

The most comprehensive study on wage subsidies in Hungary was published by O’Leary/ Koledziejczyk/ Lázár (1998). Observations were randomly drawn from register data, based on programme outflows in the second quarter of 1996 for participants and on inflows into unemployment in the second quarter of 1995 for non-participants. The analysis is based on survey

data collected in the second quarter of 1997. Based on propensity score matching, the study finds a negative or zero impact of programme participation on employment probability. One explanation offered in the paper is that the subsidy applies after six months of unemployment, and especially in the case of higher educated workers employers may recruit workers that have been unemployed for more than six months. If employers would just wait until the unemployed are eligible for the subsidy, the effect of the subsidy would be even to only prolong unemployment spells, however this is not elaborated in the study. The earnings effect is also negative.

Based on the same data source as used by O'Leary/Koledziejczyk/ Lázár (1998), the study of Galasi/Lázár/Nagy (2003) suggests strong deadweight loss due to employment incentives. However, this study is not an evaluation study in our sense, since it is restricted to programme participants only and therefore unable to identify treatment effects.

Strong deadweight effects are also suggested by the study of Csoba/Nagy/Szabó (2010), which indicates that 53 per cent of workers subject to a wage subsidy reported their subjective belief that the employer would have employed them even in the absence of the subsidy. Although the study of Csoba/Nagy/Szabó (2010) also aims at quantifying the treatment effect of three programmes, training, wage subsidy and public works, this study does not make a strong attempt to control for selection effects despite a highly selective sampling design. Survey data was collected from the stock of individuals who were registered as unemployed or as participating in selected programmes between September 2009 and February 2010. They were interviewed during August and September 2010. The programme effect is estimated based on a logit model for employment probability at the time of the interview with a dummy for programme participation. Regressors include sex, age, education, Roma origin, proportion of working life spent in unemployment, type of dwelling and place of residence. This type of measurement is unable to model equal starting conditions in terms of the timing of entry into unemployment for participants and non-participants. Although the results are in favour of a positive impact of wage subsidies, the methodological shortcomings of this study do not qualify its results for close consideration.

Based on the study of O'Leary/Koledziejczyk/Lázár (1998), it has to be concluded that wage-subsidies have had little or even a negative effect on job finding probabilities in Hungary. An explanation offered in the paper is that the subsidy was available after six months of unemployment and that employers postponed the recruitment of higher educated graduates until they were unemployed for six months to obtain this subsidy. Also, this study refers to the mid-1990s, a period strongly characterized by transition maze. Although things may have changed in the meantime, there are no reliable evaluation studies for more recent periods for Hungary.

Italy

One of the most important dimensions of employment incentives in Italy is constituted of the *Liste di Mobilità* (Mobility Lists). This programme was introduced by Law 223/91 in August 1991 (subsequently modified and extended by various amendments) and is aimed at dealing with collective redundancies by means of combined passive and active elements.

Under this programme, eligible redundant workers are enrolled in mobility lists that are managed by regional employment agencies and have access to an income support plus a set of incentives for those employers who decide to hire them. The incentives for companies that hire a worker on a permanent contract consist of an 18 months cut in social security contributions (lowered up to a 2.5% of standard contribution) and a bonus equal to 50 per cent of the unemployment benefit that the worker would have received had he or she remained on the list. This element is the employment incentive part of the programme. Employers can also benefit from comparable

incentives when hiring on a temporary basis, and benefits can be cumulated when a permanent contract follows a temporary one.

The above-mentioned unemployment benefit refers to the maximum period of what would have been the unemployment benefit provision had the hiring not taken place. This period varies according to the age of the worker at time of dismissal, i.e., one year if younger than 40, two years if between 40 and 49, and three years if older than 49. Note that the period is extended if the firm is based in the south (becoming two, three and four years respectively).

An alternative form of unemployment benefit is constituted by the "Cassa Integrazione Guadagni" (CIG). The employer may suspend the employee and stop paying the wage or reduce the working hours in specific situations indicated by law. The worker enters CIG and is provided a benefit paid by INPS (Italian social security agency). Two forms of CIG are allowed:

i. "Ordinaria" (CIGO): This can be requested by the employer in case of transitory events (not imputable to the employer) that determine the impossibility to employ the worker (e.g., temporary crises, natural disasters). If the suspension exceeds 16 hours per week it may be reviewed jointly with the unions. Maximum duration is 13 weeks, but may be extended up to a maximum of 52 weeks. The subsidy is paid by local INPS offices upon approval of a provincial commission.

ii. "Straordinaria" (CIGS): This can be requested by the employers with more than 15 employees (or with more than 15 employees at some point in time since six months preceding the request) in case of a negative economic shock to the company, restructuring, reorganization, company conversion. It may last 12 months in case of a company crisis and 24 months otherwise (may be extended by 12 months in more complex situations, up to two times). CIGS is conditional on the design of a company recovery plan and subject to consultancy with the unions. It is granted on the basis of an Italian Ministry of Labour decree.

Since 2008 a new form of CIG is available, i.e.:

iii. "In deroga": In this case, the Ministry of Labour together with the Ministry of Economy and Finances may decree, by means of specific agreements, the provision of CIG, mobility or special unemployment benefits (for no more than 12 months). At times the provision may be specifically related to certain sectors or regional areas.

Notice how CIG is a form of unemployment benefit which is not automatic but instead depends heavily on an active role by policy makers and unions. This may explain why both Italian policy makers and unions do not seem very keen to substitute this form of unemployment benefit with a universal and automatic system that may prevent both agents from extracting rents from the attribution of these forms of unemployment compensations.

In addition to these forms of benefits there are other CIG provisions specifically designed for journalists employed by newspapers, periodicals and media agencies.

Ordinary unemployment benefits through CIG or mobility schemes are provided to dismissed workers with at least two years of unemployment insurance contributions and at least 52 weekly contributions during those two years. It is not available to all unemployed workers but only for those previously employed by companies that pay to INPS a specific contribution against unemployment over and above all other contributions. The benefit must be requested by the worker before the deadline of 68 days after dismissal. The benefit lasts from eight months (for workers under 50 years of age) to 12 months. It is equal to 60 per cent of average wage for the first six months, 50 per cent

for the following two months, and 40 per cent for the remaining months. The benefit cannot exceed a maximum monthly amount.¹¹⁴

Seasonal workers are subject to specific types of provisions. In addition, reduced requirements ("a requisiti ridotti") unemployment benefits are provided to those workers employed by companies that pay to INPS a specific contribution against unemployment. These are specifically designed for short-term workers. Usually it is provided for a number of days equal to those worked in the year preceding the request (and with a maximum of 180 days).

Note that the unemployment benefit under the mobility list scheme is provided upon exhaustion of CIGS (in that case, in order to calculate the mobility benefit sum, one considers the CIGS benefit instead of the last perceived wage), or dismissal following the company's need to reduce its personnel count or when the company needs to change its line of activity, or dismissal upon the termination of the company. Note also that the mobility list benefit cannot exceed a maximum amount established by law.

In order to register workers on the mobility list, the employer must follow a very detailed administrative procedure. If the procedure is not followed correctly, the dismissal is annulled and the employer may be charged with anti-union conduct under the regulations of the Statuto dei Lavoratori (Workers' Statute). Companies that start the procedure must notify the union representatives. If unions are not represented in the company, the communication should be addressed to the sectoral associations or to the major unions at national level. For workers employed in companies with less than 15 employees enrolment is voluntary on the part of the dismissed employee. At the end of 1999 more than 16,000 Veneto workers were registered on mobility lists, whereas there were 39,000 unemployed individuals who had been employed in the past.

Redundant workers from companies with more than 15 employees may be placed on a local mobility list at a cost. The cost is borne by the employer in the form of administrative costs (including a joint examination of the procedure with the unions if requested by the latter) plus an anticipation sum paid to INPS equal to the maximum amount of monthly wage subsidy multiplied by the number of redundant workers. Dismissed employees from small companies, i.e., with fewer than 15 employees, may also choose to register voluntarily on a mobility list. In order to be eligible, workers must have been in their last job for at least one year. They may stay on the list for a maximum period of time, depending on age (one year if younger than 40, two years if between 40 and 49, and three years if over 49, the idea being that older workers are less attractive to potential employers). Income support (indennità di mobilità) is guaranteed to enrolled workers dismissed from companies with more than 15 employees, and is equal to 80 per cent of last salary during the first year, and 80 per cent of the first year perceived benefit during subsequent years.

Paggiaro and Trivellato (2002) provide some evidence on the effects of Mobility Lists using a duration model framework. They use data from the administrative database of the Regional Employment Agency in the Veneto region, a large and affluent region in North-East Italy counting 7.7 per cent of the total Italian population, producing a per capita GNP which is approximately 20 per cent higher than national average and characterized by relatively low unemployment. In 1999 16,000 workers were registered on the Mobility Lists, with a total of 39,000 previously employed individuals.

¹¹⁴ See also Ciccarone, G. (2011), Adapting unemployment benefit systems to the economic cycle, European Employment Observatory country report for Italy, July 2011, footnote 2.

Raw data shows that, based on the programme design, the best strategy for an employer is to hire a worker aged 40 on the first day of his or her enrolment on the mobility list on a temporary contract which is then converted into a permanent one, thus saving 42.6 per cent of total labour costs over a two-year period. In general, the reduction in social security contributions is the biggest advantage for employers.

Paggiaro and Trivellato use data from 1 January 1995 to 31 March 1999. Over this period they follow each enrolled worker and observe whether there is an exit into a permanent position, and whether a cancellation occurred when the eligibility period expired. Observed worker characteristics include gender, age, industry of last job company, position in last job, education, province of residence, entitlement to income support, day of enrolment, length of registration on list and current status.

The most important problem when evaluating the effect of Mobility Lists is that it consists of a universal programme, i.e., it is a programme that is offered to all eligible workers. so it is difficult to define a feasible control group in an evaluation exercise. Furthermore, the dataset consists of enrolled workers only. The researcher must therefore focus on differential effects among enrolled workers.

The programme is evaluated on the basis of successful transitions to permanent jobs. The sample consists of 42,061 individuals who registered on the lists between 1995 and 1999. 59 per cent are women of whom 64 per cent come from small companies. The opposite is true for men, of whom 56 per cent have income support. 66 per cent of workers are under 40. Permanent contracts are higher for men (32%) than women (21%), and are significantly low for older workers.

The authors provide some non-parametric survival analyses to investigate transitions of enlisted workers to permanent jobs. Kaplan-Meier estimates show that survival functions decline by steps corresponding to one, two and three years, indicating that the programme design is crucial for explaining transitions. Also, survival functions by age are significantly different, with smaller hazard to employment for older workers. In particular, workers over 49 with income support are characterized by flat survival functions, meaning that most of them may move from employment to retirement. Income support has a particularly negative effect on the transition of older workers into employment.

Focusing on workers under the age of 49 only (because of the peculiarities of older workers discussed above), the sample is reduced to 36,405 workers. The authors investigate the differential treatment effect of the generous features of the programme aimed at workers aged 40-49, compared to workers aged under 40. Conditionally on company size, the allocation to treatment depends on age only and therefore the assignment fits the sharp regression discontinuity design in which compliance with treatment assignment is perfect (Trochim, 1984). Ideally, one would investigate workers in the neighbourhood of age 40. However, due to sample limitations, the authors consider all ages controlling for observed and unobserved heterogeneity using a mixed proportional hazard specification and a non-parametric mass point specification as in Heckman and Singer (1984).

The baseline hazard functions show negative duration dependence within the first and second years. Looking at workers with income support, the older group of workers can transfer a larger bonus to potential employers and this has a significant negative effect on the hazard to move to permanent employment. In the case of workers dismissed by small companies, the incentives granted to potential employers do not include a transfer of the benefit element resulting in much less pronounced differential treatment effects.

Summarizing the main results of the study, the authors find that older workers with income support have a lower probability of transitioning to employment compared to younger workers. Secondly, no appreciable differences are found for redundant workers from small companies, i.e., those for whom no benefit is transferred to the employer.

In conclusion, if it is the social security rebate component that prevails on benefit transfer, the authors suggest it might be advisable to phase out cuts in social security contributions and reduce the length of time older workers are allowed to stay on the lists.

Overall, the internal validity of this study is somewhat limited because of the limitation in the programme design that does not allow for its impact to be assessed under a clear evaluation setting. However, it provides some useful insights into some of the main characteristics of the Mobility Lists programme and some general evidence on its implications.

The same Mobility List scheme was analysed by Rettore et al. (2008), who extend the previous analysis by providing a more sophisticated evaluation study. Their focus is on the impact of extending the duration of eligibility on re-employment probabilities and wages over the 36 months following enrolment on the list. The lack of a comparison group does not allow the identification of a comparable counterfactual for workers eligible for Mobility Lists. The reason why it is not possible to identify a sensible comparison group made up of ineligible workers who could approximate the counterfactual for workers eligible for the mobility lists is because all workers who fall under certain characteristics are eligible. Also, the dataset consists of enrolled workers only. The researcher must therefore focus on differential effects among enrolled workers. Thus, as in the previous study, the only possible evaluation is that regarding the effect of extending the eligibility period from one to two years and from two to three years. The evaluation problem then rests in separating the effect of age (that is the criteria used to provide extended eligibility) from the effect of the extended duration. The average treatment effect is identified by using a regression discontinuity design.

The authors analyse the effect of allowing workers to stay on Mobility Lists from one to two years around the age threshold of 40 on the probability of employment. Two contrasting effects are at play here. On the one hand, companies have an extended benefit and therefore workers may receive more job offers than they would otherwise; on the other hand, the extension of the passive element of the Mobility Lists may increase workers' reservation wages and therefore lengthen their unemployment spell. Extending the eligibility period to two years implies that both incentives tend to be stronger and therefore the differential treatment effect may vary according to which of the two prevails.

The authors exclude general equilibrium effects given the low proportion of workers involved in the programme (8,000 per year versus a stock of 100,000 unemployed in the region). The outcome evaluated by the authors is the employment state of workers in the 36 months following enrolment and their wage level at the end of the observation period.

A sharp regression discontinuity around the threshold of 40 years of age may suffer from limited external validity, as the impact of the programme is likely to be heterogeneous across subjects. In addition, the data shows a possible selection of workers to be placed on Mobility Lists, as a large discontinuity around age 50 is observed in the distribution of workers enrolled by age. For this reason, the authors then carry a set of over-identification tests, following Lee (2008), to validate their regression discontinuity design (RDD). They compare individuals just above and just below the threshold of 40 years of age, with respect to their pre-programme employment history. They then use local linear regression (LLR) to estimate the conditional expectations of the two potential outcomes around the threshold.

The data used is the population of workers enrolled in Mobility Lists in the Veneto region from 1995 to 1998 matched with information derived from INPS (Italian social security agency) on employment histories between 1975 and 2001. Final sample after consistency checks is 23,644 individuals, i.e., 80 per cent of original population.

The authors analyse the model separately for the two Mobility Lists programmes, by gender and at the age 40 and age 50 thresholds.

Workers under age 40 constitute two-thirds of the total (80% when considering women). 59.5 per cent do not benefit from a monetary subsidy since they have been dismissed by small companies. A worker is considered to be employed if the worker has worked at least one week in one month of observation. Over-identification tests show that the employment history is the same for workers across the thresholds. This suggests that the individuals considered in the RDD analysis can be considered similar with respect to unobservable factors relevant to labour market outcomes.

The analysis shows increasing employment rates at the age 40 threshold for all workers, with a much steeper increase for workers without benefits. Furthermore, an additional year of eligibility does not have a significant effect on the probability of re-employment of women after three years. However, the provision of benefits for a longer period has an impact on their re-entry into work, which is delayed.

Around the age 50 threshold the effect of one additional year of eligibility is negative over time, but not significant for workers without benefits. However, there is a large negative effect for workers with benefits (28% for men and 15% for women after one year, growing respectively to 33% and 27% at the end of the 36 months).

The effect on wages is negligible for all groups.

Summarizing the results of the evaluation study, the eligibility extension of one more year for workers dismissed by small companies with no entitlement to monetary benefits does not produce any significant changes in the re-employment probabilities and wages, at both thresholds.

Things are different for those workers who, having been dismissed by large companies, are entitled to a monetary benefit that can then be partly transferred to the potential employer willing to hire them. In this case the only significant effect at the age 40 threshold is a lower re-employment rate for women of 40 years of age (usually low wage) after two years from enrolment. The effect dies out later on, meaning that women respond to the change in incentives produced by the benefit, possibly because of family commitments or child care. This means that being more generous to older workers is of no more help in getting them back to work sooner than a sensible increase in the costs sustained by the programme. The causal effect around the age 50 threshold is strong, with the provision of benefits for a longer period having a negative effect on re-employment probabilities, possibly because workers may use this as a bridge to retirement. This effect is in open contrast with the EU objective of increasing the employment rate of older workers, which is a problem of particular relevance in Italy when compared to other European countries.

As a final remark, future implementation of these kinds of programmes should be accompanied by rigorous evaluation schemes and a set of additional tools (such as those suggested by the authors, i.e., monitoring of job seekers, activation provisions, enforcement of work tests) that may improve the welfare-to-work character of the policy.

Cipollone et al. (2004) investigate the implications of a generous tax credit incentive provided by the Italian Finance Law for 2001. More specifically, since October 2000 every employer who hires a new employee on a permanent contract would benefit from a tax credit of 413 Euros per month/worker from hiring date to December 2003. The credit would rise to 613 Euros if the worker was based in the south. Eligibility criteria for workers are set in such a way that they must be at least 25, and must not have held a position in the 24 preceding months. Companies are eligible if the newly hired employee increases the level of permanent employment (at company level) above the average experienced between October 1999 and September 2000. The tax credit can be demanded against all types of taxes (income, social security and value added), it can be passed across fiscal years and cumulated with other incentives.

The incentive is generous since the labour cost reduction varies from 9.3 per cent in the banking sector in central and northern Italy to 60 per cent in the agricultural sector in the south.

Examining the Italian Labour Force Survey data, the authors show how, after the introduction of the incentive, temporary contracts that had been the only source of employment growth since 1993 stopped increasing in favour of permanent jobs. In October 2001, the number of fixed-term contracts was smaller than one year before. Furthermore, the largest increase in permanent jobs since 1993 occurred despite the economic downturn in the period. A similar increase in permanent jobs took place in 2002, but since 2003 the decline in the business cycle has induced companies to recur to fixed term contracts. Data from the Ministry of Finance that accounts for the forgone revenues due to tax credits, shows that the programme was successful, involving far more workers (around 273,000) than was foreseen *ex-ante* (around 83,000).

The authors aim to investigate how labour supply is affected, i.e., whether inactive people are encouraged to enter the labour market and whether the increase, if present, is homogeneous across individual characteristics.

They estimate a probit model where the probability of entering the labour force depends on whether the individual is eligible for the subsidy, and on demographic characteristics including age and education. The research design is difference-in-difference, where the effect of the subsidy between eligible (treated) and not eligible (control) between 2002 and 2001 is compared to the difference between potentially eligible and not eligible over a reference year.

First, the eligible are defined as those aged 25-26 and the control as those aged 20-24. At a second stage the eligible groups definition is relaxed and also those aged over 26 are included.

The micro data used in the analysis is provided by the Italian LFS for 1995 to 2002. For reasons related to the way in which the Italian LFS reconstructs individual work episodes, the authors only observe previous activity status of 12 months before, with no information in between. Agricultural sector workers (whose specificities would introduce noise) and the public sector (whose workers are not eligible) are excluded from the analysis. The authors find significant effects of the incentive on the probability of entering the labour force when considering eligible groups that include individuals aged 30 and over. Labour force participation significantly increased by 2.8 per cent in 2001 and a further 0.9 per cent in 2002 for eligible individuals up to 35 years of age. The effect is even stronger if older eligible individuals are considered. The most affected individuals are those aged 45-54, pointing to possible transitions towards activity originating from individuals previously working in the informal sector. Results are robust to a number of robustness checks, including checks on the functional form.

The authors also investigate the effect of the incentive for participating either as an unemployed or as an employee. Focusing on the transition to unemployment the results are similar, i.e., stronger effects on older workers.

Overall, the analysis seems to point to a revitalization effect of the programme on a flow of older workers transitioning from the informal economy, which has already been present in the data since the second half of the 1990s.

In a companion study, Cipollone and Guelfi (2003) show how the tax credit on new hiring on a permanent contract basis has not induced a significant change to the overall employment probability. Companies have resorted to this subsidy to hire young and well educated workers on a permanent basis. It cannot be excluded that these workers would have been hired irrespective of the subsidy, albeit after a limited period under a temporary contract. Conditional on being hired, permanent contracts increased after the subsidy was introduced. Workers with a college degree experienced a 10 per cent rise in the probability of being hired on a permanent basis, compared to 4 per cent of workers with a high school diploma and no significant change for less educated workers.

In the same study, Cipollone and Guelfi investigate the implications of the employment subsidies designed by the Italian Finance Law 2001. They provide a theoretical framework under which the effect of the subsidy is analysed. Their theoretical model suggests that the policy increases the probability of a permanent contract for those individuals who are more likely to be permanent employees, irrespective of the subsidy. Also, pre-reform wages are higher than post-reform wages.

They also present an empirical analysis using LFS data (October releases of the 1993-2001 Labour Force Survey) and consider as new hires those individuals who have held their job for less than 13 months. They focus on the private non-farm sector. They find that the share of permanent contracts increased from 2000 to 2001, and that the share of eligible workers (25 and over) increased more than non-eligible (under 25). The greatest increase is concentrated among the young, i.e., those between ages 25 and 40.

Furthermore, companies seem to offer more permanent jobs to more educated workers. The short-term contract type that decreased the most after the introduction of the subsidy was the apprenticeship and training employment category. The latter result suggests that companies may use the subsidy to anticipate the hiring that would have taken place anyway, after the training period, irrespective of the subsidy.

Cipollone and Guelfi also estimate a probit model and evaluate the effect of the subsidy on the probability of being hired with a permanent contract conditional on having been hired. The probability is a function of age, education, demographic characteristics, year dummies and a dummy equal to 1 if the worker is eligible. An interaction between the dummy and education, measured by years of schooling, is also included.

The probability of being hired on a permanent contract is found to increase between 0.7 and 4.2 percentage points, according to the adopted specification. Moreover, only in some cases are the estimated coefficients statistically significant. As regards the implications of education, one year of education above average increases the probability of being employed under a permanent contract by 1 percentage point. This means that a college graduate has a 7 to 9 per cent higher probability in 2001 than in the 1990s.

The authors provide a number of robustness checks on their results, including checking for measurement errors, using a non-parametric specification and testing for geographical differences. Previous results are confirmed. The authors also estimate a probit model of the probability of being hired on the October releases of the 1993-2001 Labour Force Survey, including all people aged 15 to 65. The tax credit is not found to have a significant effect on the probability of being hired.

In summary, the authors show how the tax credit on new hiring on a permanent contract basis has not induced a significant change to the overall employment probability. Companies have resorted to this subsidy to hire young and well educated workers on a permanent basis. It cannot be excluded that these workers would have been hired irrespective of the subsidy, albeit after a limited period under a temporary contract. Conditional on being hired, permanent contracts increased after the subsidy was introduced. Workers with a college degree experienced a 10 per cent rise in the probability of being hired on a permanent basis, compared to 4 per cent of workers with a high school diploma and no significant change for less educated workers.

Spain

Of all the European countries, Spain has the highest rate of temporary contracts. There is increasing evidence that although such contracts provide companies the flexibility to adjust their labour demand, they also help to increase the difference between insiders and outsiders who find themselves trapped between temporary contracts and unemployment spells. For this reason, governments have restricted the conditions under which temporary employees can be hired and they have provided incentives for increasing hiring on the basis of permanent contracts. So the rationale behind employment incentives for permanent contracts was not to increase the overall employment level, but rather to improve job security.

Dismissal costs are increasing according to seniority in the company although there is an upper limit. In particular, the severance pay for workers dismissed on 'objective grounds' amounts to two-thirds of a month's pay per year of service up to a maximum of 12 months. When the employer acknowledges unfair dismissal, the severance payment is 45 days pay per year of service up to a maximum of 42 months' wages. For the new permanent employment promotion contract after 1997, severance pay in the event of unfair dismissal amounts to 33 days pay per year of service, with a maximum of 24 months' pay. About 90 per cent of court cases are found to be unfair dismissals.

A different procedure applies to collective dismissals (10 or more workers in companies with less than 100 employees, at least 10 per cent of workforce in companies with 100-299 employees or at least 30 workers in companies with 300+ employees). In this case, the employer must inform and consult with works council or trade union delegates and the employer must also apply for authorization with the local labour authority. Dismissal costs are, however, calculated in a similar way.

The severance pay for fixed term contracts is 8 days per year of service.

In fact, the rise of temporary contracts from 18 per cent in 1987 to 33 per cent in 1994 because of the flexibility measures adopted in 1984 induced the government to introduce three reforms in the period under evaluation: a first reform in 1997, an extension of the first in 2001 and a third reform in 2006. The first reform consisted of establishing subsidies for the creation of new permanent contracts by applying a substantial reduction in company payroll taxes for new permanent hires and designing a new permanent contract with lower firing costs addressed to targeted population groups (women, long-term unemployed and younger workers). The 2001 and 2006 reforms basically extended similar measures to other groups of workers. These reforms also encouraged regional governments to establish their own wage subsidy programmes. Again, these regional

programmes consisted of two types of subsidies: one for new permanent contracts signed for fixed-term employees at the same company and another for unemployed workers.

It is worth mentioning that on average the 1997 reform reduced dismissal costs of new permanent contracts, called "permanent employment promotion contracts" - contrato para el fomento de la contratación indefinida - from 45 to 33 days of salary pay per year worked, a reduction of 26.7 per cent. In addition, the 1997 reform reduced the payroll tax rate of 29.3 per cent of the salary of young workers by 40 per cent for contracts signed in 1997 and 1998 and by 35 per cent and 25 per cent for contracts signed after 1999 for the first and second years respectively. These reductions were improved by the 2001 and 2006 reforms. The main protection offered by a permanent contract in Spain, however, is the required justification of a dismissal and the lengthy time it takes for employment services to judge the dismissal of a permanent contract as either fair or unfair. This protection has not changed with the new type of permanent contract introduced in 1997.

The current evaluation studies on employment incentives in Spain clearly focus on changes in the share of fixed-term contracts. They do not consider changes in the employment probabilities of certain target groups.

Kugler et al. (2002) analysed the effect of the 1997 reform using the single group of workers not targeted by the reform, i.e., men aged 30-45, as a control group. Arellano (2005) examined the impact of the 2001 labour market reform on a particular region, the Comunidad de Madrid. Toharia et al. (2008) is the most extensive academic work on the issue for the Spanish economy. The report, financed by the Spanish Ministry of Labour and Immigration, provides an exhaustive evaluation of wage subsidies at three levels: macroeconomic, microeconomic and institutional. Our interest focuses on the microeconomic impact evaluation. This part of the report uses three different datasets: information provided by the Public Employment Services, the Muestra Continua de Vidas Laborales and, lastly, Social Security Records for two regions, Andalucía and Catalunya. Cebrian et al. (2009) extended the analysis by Toharia et al. (2008) using the Muestra Continua de Vidas Laborales. Lastly, García-Pérez and Rebollo (2009) exploited the regional variation of wage subsidies to apply a difference-in-difference estimator to analyse the impact of subsidies.

The main conclusion of the papers mentioned above is that the reduction in dismissal costs and payroll taxes had no significant effect on permanent employment probability for older workers (including new contracts and transitions from temporary ones), but it had a positive effect both for young men and women, with a higher effect for the former. It is worth mentioning that nearly all studies apply a similar methodological approach and similar databases. The earlier studies analysed the Labour Force Survey but most recent ones focused on the analysis of public records and, more particularly, the Muestra Continua de Vidas Laborales, which is the only available longitudinal dataset for the analysis of the Spanish labour market. The estimated effect of the policy is an approximate 0.02 increase in the probability of permanent employment, a 0.05 increase in the probability of transitions from unemployment to a permanent contract and a 0.03 increase in the probability of transitions from temporary to permanent contracts. In percentage terms, these values imply increases of the probability of permanent contracts of 4 per cent for young men and 8 per cent for young women.

The only study that has tried to consider the economic cost of the policy is Kugler et al. (2002). Taking into account the value of the reduction in payroll taxes and the reduction in dismissal costs and making some assumptions about yearly salary and tenure according to the Spanish Structure of Earnings Survey for 1995, they estimate quarterly dismissal costs to be about 7.4 per cent and 3.6 per cent of labour costs for young men and women, respectively. Payroll taxes account for 19.9 per cent and 21.3 per cent of total labour costs for young men and women, respectively. So, the

reductions approved by the 1997 reform were between 8 per cent and 10 per cent of total labour costs. Taking into account that the increases in permanent employment probabilities were about 4 per cent and 8 per cent for men and women respectively, they estimate labour demand elasticities to labour costs of -0.2. The results suggest a fairly elastic employment response of young workers, especially of young men, to changes in non-wage labour costs, but an inelastic response of older workers. This aspect is crucial when trying to identify the potential impact of similar measures in other economies.

Summarizing, although nearly all studies have found a positive effect on permanent job creation and job stability (particularly for young workers), wage subsidies have not been effective in reducing the share of temporary contracts in Spain.

Conclusions from variations across countries

In Spain as well as in Italy, the issue of an increasing share of fixed-term contracts is in the focus of labour market policy. Wage subsidies do not primarily intend to increase employment as such, but rather to reduce the share of temporary contracts.

For Spain, we find a small but positive effect on permanent job creation and job stability, particularly for young workers. This is similar to the results that can be found for Italy with respect to a subsidy in favour of permanent contracts. Here too, the group that benefited most from this incentive was well educated young workers. However, the results for Italy especially show that there has been no effect in terms of an overall increase of employment.

Although permanent employment may be viewed as a value in its own, the related incentive must be very costly, because permanent employment does not generate higher fiscal revenue than temporary employment. Moreover, the incentive has increased labour force participation and thus contributed to rising unemployment.

In Hungary, as in many other countries, wage subsidies are intended to increase employment in general. However, whereas wage subsidies seem to have a positive effect in many countries, e.g., Germany although not considered here, the case of Hungary is special, because the available studies find that wage subsidies have had little or even a negative effect on job finding probabilities. This mainly goes back to a study from O'Leary/Koledziejczyk/Lázár (1998), which refers to a possibly poorly designed subsidy, incentivizing employers to wait until the worker is unemployed for six months in order to obtain the subsidy.

A peculiar form of general employment incentives is also present in Italy. It is related to the eligibility of workers for unemployment compensation. Companies that hire these workers may claim 50 per cent of the workers' unemployment compensation until exhaustion. There is clear evidence of a strong lock-in effect, with regard to this type of subsidy. This means that older workers (aged 40-49) take more time to switch to an unsubsidized job than younger workers (aged under 40). This may be viewed as a direct consequence of the duration of eligibility, which is significantly longer for older workers than for younger workers. For workers aged over 50, the compensation effect dominates the employment incentive, which means that the overall employment probability of this group shows a net decline. Evidence for the overall effect of this type of subsidy on employment is not yet available.

An issue that wage subsidies raise throughout is deadweight effects. Wage subsidies may be subject to large-scale deadweight effects as the Hungarian study of 2010 shows where half of the surveyed unemployed job finders indicate they would have been hired even without the subsidy.

But in general, deadweight losses and the risk that employers substitute workers by subsidized workers are not quantified in any study.

4.4.6 Supported Employment and Rehabilitation (Poland, Sweden)

Poland

Disability is a huge problem in Poland. For example, 6.2 million people were registered as disabled in 2004. That stems from typical reasons but on top of them the country suffers from large scale misuse of disability status.¹¹⁵ It is commonly known that the real number of disabled is substantially lower than the official data shows.¹¹⁶

PFRON¹¹⁷ is the leading institution in organizing, financing and coordinating measures for the disabled. It also publishes information on measures for the disabled. There is also Government Plenipotentiary, which is responsible for coordinating appropriate activities at the government level. However, a number of other institutions are involved. These are self-government bodies at regional, local and communal level; there are also various NGOs.

Employers are obliged to employ at least 6 per cent of disabled workers. If they do not they must pay a special fee charged by PFRON.¹¹⁸ It uses the revenues to finance other measures for the disabled such as creation and subsidization (if necessary) of jobs for the disabled, social and work rehabilitation, co-financing government programmes for the disabled. Local authorities are obliged to implement measures for the disabled themselves or in cooperation with PFRON.

In general, there are three types of measures aimed at improving the situation of the disabled. NGOs focus their activities on:

- Helping the disabled and their families with various life problems;
- Supplementing public institutions' activities in health care, rehabilitation, education, social assistance, training and employment of the disabled;
- Public education for more acceptance and inclusion of the disabled in society;
- Participation in social dialogue on behalf of the disabled.

Governmental programmes aim to provide employment in various forms:

- Work therapy;
- Training and advising in starting self-employment;
- Job advising ("work clubs");
- Direct job creation.

Last but not least, there are general types of measures:

- Regulations against discrimination of the disabled in society and in particular in companies;
- Special rights for the disabled (fewer hours, additional breaks, more holidays, no over-time)¹¹⁹;

¹¹⁵ There is no fully reliable estimation of the scale of that. According to Central Statistical Office census of 2002 around 1.7 million people having disability status were not in fact disabled. A kind of commonly accepted (not confirmed by any calculation) assumption is that the real number of the disabled is not larger than half of the official figures. That takes into account various levels of disability. I do not discuss here details of the overestimation problem.

¹¹⁶ Disability status is useful for workers and their employers since that reduces non-labour costs of employment. That created a strong push for cheating. Moreover, state agencies used to apply very loose criteria that were easy to bypass. That was a kind of "policy" reducing pressure at the labour market in the early 1990s. That approach is not used any more but its effects still affect the situation.

¹¹⁷ Państwowy Fundusz Rehabilitacji Osób Niepełnosprawnych (PFRON).

¹¹⁸ Typically employers choose to either employ even more than 6 per cent of disabled workers or they employ close to zero such workers and treat the fee as an additional tax.

¹¹⁹ That measures generate substantial additional costs for the employers. According to the Ministry of Economy the costs vary from 3 to 23 per cent gross wage additional cost.

- Public and non-public labour offices for the disabled.

Employment of the disabled can be financially supported via a number of measures:

- Refunding of costs of work place adaptation for disabled workers;
- Quota and fee system;
- Financial support for employers not covered by quota and fee system (employing less than 25 workers or employing the 6 per cent of disabled workers);
- Support for sheltered work companies;
- Co-financing supported employment;
- Work activity enterprises;
- Preferences for self-employed.

The disabled are entitled to social security benefits. Regular benefits are similar to traditional old-age benefits. There are also social benefits that are the equivalent of regular social assistance benefits. The disabled can work and claim disability benefits unless their wage exceeds 130 per cent of the average wage in the economy. If the wage is above 70 per cent the benefit is reduced. This regulation is often violated. The disabled – irrespective of whether they actually are or not – are often employed either without any registration or if they are employed with registration their reported wage is below the threshold and the rest is often paid “under the counter”.

Disability benefits for agricultural workers are a separate matter.¹²⁰ These benefits are paid through a separate agency called KRUS.¹²¹ Expenditures through KRUS are heavily subsidized (around 90 per cent) and set the high level of low agricultural productivity employment in Poland.

Medical rehabilitation plays an extremely important role when policy measures are offered to the disabled. Rehabilitation should contribute to increasing employability of the disabled. A survey used by Golinowska (2004) suggests that around 50 per cent of the disabled who were treated were announced capable for work. Only around 25 per cent of them returned to the labour market.

The institutional framework regulating the above measures is criticized because of its instability and limited transparency; see Piechota (2003).

The only available study to address the impact of supported work and rehabilitation in Poland is the one by Chłoń-Domińczak and Poznańska (2007). The authors provide a comprehensive view of the measures for supported work and rehabilitation. They do not, however, evaluate any particular programme but rather investigate the employment probability of disabled workers compared to other workers. It is therefore not a treatment study in the narrow sense of the term. According to their estimations, employment probability for working-age disabled workers was 20-40 per cent below the probability observed for workers with the same characteristics bar being disabled. The results come from a binominal logit regression using PLFS data for 1997, 2002 and 2005. Moreover, Chłoń-Domińczak and Poznańska find that:

- Refunding works poorly since the employers do not perceive the incentives as being strong enough,
- Quota and fee system prefers employment of minor disability; it prefers employment of the disabled in low earnings companies and sectors; it partially blocks employment of non-disabled workers since the fees are a function of total employment in companies;
- Financial support is not perceived as being truly attractive and deadweight loss occurs at a significant level;

¹²⁰ Actually, it is more appropriate to call them peasants since the vast majority of them stay in subsistence farms.

¹²¹ Kasa Rolniczego Ubezpieczenia Społecznego (KRUS).

- Sheltered work enterprises are non-effective; weak or wrong incentives are applied;
- Supported employment of the disabled is recommended since it addresses the needs of the unemployed;
- Work activity enterprises aim at severely disabled workers and as such play an important activating role for this virtually unemployable group of workers;
- Privileges for self-employed disabled workers discriminate other workers and generate labour market distortions.

However, these results only point to a number of potential problems. They may not be interpreted in any kind of causality with regard to policy instruments.

Sweden

In 1991, Sweden introduced a major rehabilitation reform; the introduction of vocational training (VT) was an important part of this reform. A major reason for the reform was to decrease the number of individuals on long-term sickness. The main purpose of VT is to assist long-term sick or disabled individuals in regaining their working capacity. The reform led to a strong increase in the number of VT programmes.

Besides VT programmes, rehabilitation of disabled individuals is supported by wage subsidies (lönebidrag) and sheltered employment. Samhall, a state-owned company, is the main provider of sheltered employment. Furthermore, all traditional labour market programmes are open to disabled workers. Subsidized employment is a subsidy granted to the employer for hiring an individual with a disability. The amount of this subsidy is dependent on the severity of the disability. Sheltered employment comes in two different forms, i.e., sheltered employment within the public sector and at Samhall. Samhall is a limited liability company and part of Sweden's active labour market policy. The provided services include property services, cleaning, information technology support, service on technical aids, domestic services and catering services. The workplaces are distributed across the country wherever there is a need for job opportunities for the disabled. The target group for sheltered employment are those individuals with such disabilities that employment on the open labour market is impossible. The total cost of subsidized and sheltered employment in 2007 was 12.6 billion SEK (one Euro is approximately nine SEK) of which 4 billion SEK was allocated to Samhall AB.

The 1991 reform with regard to VT was analysed in detail in a study by Frölich/Heshmati/Lechner (2004). Their paper classifies the related programmes into six categories. (1) WORKPLACE, work training at the current workplace or at a new workplace, (2) EDUCATIONAL, educational training towards a new occupation, (3) MEDICAL and (4) SOCIAL, programmes that intend to restore health and basic work capacity, (5) PASSIVE, evaluations intended to assist in deciding whether the individual can recover his/her previous work capacity and (6) NO REHABILITATION.

Selection into rehabilitation consists of two stages. Firstly, a specialist decides the need and chances of success of rehabilitation and secondly, the insurance office or employer work out a rehabilitation plan together with the sick person. All relevant information regarding the characteristics of the sick person is recorded and included in the data. This data is crucial for identifying a treatment effect.

The evaluation in the paper is based on high-quality administrative micro data. The data has been collected by the National Social Insurance Board (RFV) and it includes 75,000 sickness cases that received sickness cash benefit for a period of at least 60 consecutive days between July 1991 and June 1994. The data consists of three independent cross-sections 1991/92, 1992/93 and 1993/94. For each year and from each local insurance office, 70 cases were randomly selected out of all

sickness cases with at least 60 days duration. These cases were then followed up either until the case was closed or until the data collection period ended in December 1994. Note that the same number of cases was drawn from each office regardless of the size of the office which means that sickness cases that occurred in smaller insurance offices are over-represented.

The data includes information about socio-economic variables, health status and also information about the selection process into rehabilitation. The author claims that all relevant factors that affect the selection process and the subsequent labour market status are available. Indeed, the data contains a wealth of information. For instance, the information collected before the sickness spell consists of age, gender, marital status, citizenship, education, occupation, previous health record, previous participation in VR, employment status, earnings and loss of earnings due to sickness. Information is also available on county of residence, community type, local unemployment rate, year of sickness registration, the type of medical institution that registered sick leave, the initial degree of sickness, any indications of alcohol or drug abuse, and also the medical diagnosis.

Information about the rehabilitation period itself is limited to the types of rehabilitative measures taken. Unfortunately, no reliable information on the length of rehabilitative measures or their sequential ordering is available. The outflow destination is reported for closed sickness cases, but at the end of the data collection period many cases remained open (still long-term sick).

The analysis in the paper is based on five counties in Western Sweden with 67 local insurance offices and a total of 10,309 documented long-term sickness cases. Deleted from the analysis are individuals with missing values on important variables, individuals receiving pension benefit at time of sickness registration, and all individuals in education or aged over 55. Of the remaining 6,287 cases, 3,087 had received some form of rehabilitation.

A minor problem in the data is that some individuals received more than one type of rehabilitation. However, the sequence of the rehabilitation or whether rehabilitation was given in parallel, have not been recorded. For these cases one measure of rehabilitation has been assigned and for most cases this was medical rehabilitation.

According to the data, the largest group is NO REHABILITATION (3,200) followed by WORKPLACE (1,118), MEDICAL (1,108), EDUCATION (360), PASSIVE (302) and SOCIAL (199). The average length of sickness varies between the different programmes, from 239 days for the NO REHABILITATION to 410 for EDUCATIONAL. For NO REHABILITATION only 7 per cent of all cases remain open in December 1994. The corresponding figure for the PASSIVE group is 27 per cent. About 50 per cent of the participants in NO REHABILITATION or WORKPLACE rehabilitation return to their previous employer, compared to only 18 per cent in EDUCATION.

Outflows to employment at a new workplace or sheltered workplace are rare for all treatment groups except for EDUCATIONAL, whose employment rate at new and sheltered workplaces combines to 22 per cent. Outflows to unemployment vary between 8-17 per cent, and between 10-20 per cent of all cases terminate in temporary or permanent disability pensions. Finally, about 10 per cent leave for other destinations, such as education and out-of-labour force.

The paper summarizes the different outflow destinations in two success measures. i.e., re-employment (returns to previous regular workplace or finds employment at a new regular workplace), and outflows to the labour force (moves into a regular job, into a sheltered workplace or into unemployment).

The evaluation is based on a nonparametric propensity score matching method for multiple treatments. Average programme effects are estimated for the population as well as for subpopulations in order to detect effect heterogeneity. The matching estimators for multiple treatments (Imbens 2000 and Lechner 2001), consider the different compositions of characteristics among participants and non-participants as well as the heterogeneity of the provided rehabilitation programmes. Thus, different rehabilitation programmes can affect different individuals differently. Two dimensions of the outcome of the rehabilitation are estimated; if, on average, participation in rehabilitation was beneficial to the labour market prospects of the participants, and whether it would have been more appropriate to participate in a different programme than in the one actually observed.

The problem of identifying the treatment effects by matching methods are discussed carefully. The authors argue that the important criteria for identification, that all variables that simultaneously affect the participation decision and subsequent labour market outcomes are observed, are fulfilled. "We argue that due to the specifics of the Swedish institutions and the selection process, and especially due to the very informative data set available, these identification conditions are satisfied."

The propensity scores for all six treatment types are estimated using a multinomial probit model. The matching estimator is implemented based on these estimated participation probabilities, but also using information about medical and non-medical VT recommendation. The quality of the matching is carefully evaluated and a variety of sensitivity analyses indicates that the results are not very sensitive to the specification of the participation probability model. However, omitting central variables such as the subjective recommendations of physician and caseworker, severely biases the results towards an exaggeration of the negative treatment effects of some rehabilitation programmes.

The results for outflows into employment show that PASSIVE, EDUCATIONAL and MEDICAL rehabilitation reduced re-employment chances by 12, 19 and 8 percentage points, compared to NO REHABILITATION. Furthermore, EDUCATIONAL rehabilitation impaired re-employment by more than 10 percentage -points relative to WORKPLACE, MEDICAL and SOCIAL rehabilitation. The composite effects indicate that NO REHABILITATION and WORKPLACE rehabilitation are superior to the other programmes.

The main results for average treatment effects on the treated shows that NO REHABILITATION seems to be preferable to EDUCATIONAL (28per cent) and WORKPLACE (14 per cent) rehabilitation. The composite effects suggest that NO REHABILITATION, followed by WORKPLACE rehabilitation, were most beneficial to re-employment chances and EDUCATIONAL and SOCIAL rehabilitation are amongst the least successful.

Thus, NO REHABILITATION seems superior to all other programmes. WORKPLACE rehabilitation seems somewhat more successful as regards re-employment chances; however, there is no such effect on reintegration into the labour force. An explanation given in the paper for these negative effects is that rehabilitation prolongs the sickness spell and the final outflow destination for the censored cases is unknown. This is checked by further evaluations and the results indicate that the negative effects of PASSIVE, MEDICAL and WORKPLACE rehabilitation relative to NO Rehabilitation, can largely be attributed to a prolongation of registered sickness due to rehabilitation. It is argued that plausible reasons for this lengthening could be, apart from the time spent in rehabilitative measures, bureaucratic delays or inertia in the rehabilitative process, particularly for PASSIVE rehabilitation.

The negative effects of EDUCATIONAL rehabilitation cannot be explained by lengthening of the sickness spell. EDUCATIONAL rehabilitation appears to be a path towards unemployment and non-competitive employment. The authors argue that "this negative effect may be caused by reduced job search activity. Stigma effects might also contribute to a reduction in employment chances when participating in EDUCATIONAL rehabilitation, because the pool of participants in EDUCATIONAL rehabilitation contains a large proportion of cases with previous sick-leave and vocational rehabilitation".

The results challenge the efficiency of active VT. Even if the data quality is high and the methods are robust and well designed for the evaluation, a few problems still remain. The most important one seems to be the presence of right censoring, i.e., the observation period is too short to observe the end of the programme. Active VT prolongs the sickness period and might eventually lead to a positive outcome. However, in many cases this potential positive outcome is not observed due to right censoring.

As mentioned in the introduction on supported employment in Sweden, subsidized employment (lönebidrag) and sheltered work places (Samhall) are other measures aimed at providing work for disabled workers. No evaluation study in the sense of an impact analysis is currently available for subsidized employment and sheltered employment in Sweden. The only study available is that of Skedinger and Widerstedt (2007), which evaluates recruitment practices of Samhall.

The targets for Samhall, which, according to the company, are "equally important", are set on an annual basis. In 1999 (a year relevant for the Skedinger/Widerstedt study), the targets were the following:

- Recruitment from prioritized groups; more than 40 per cent of new recruits should belong to a prioritized group, currently people with intellectual or psychic disabilities or multiple disabilities;
- Transitions to employment outside Samhall; each year, more than 3 per cent of employees should find other, possibly subsidized, employment;
- Number of work hours supplied by disabled employees; Samhall should provide approximately 32 million work hours, equivalent to about 17,800 full-time employment contracts;
- Profitability; Samhall should show a positive financial result (given current Government subsidies), and reduce its dependence on Government financial support.

As mentioned by Skedinger and Widerstedt, these may be conflicting goals. Most importantly, the targeting towards individuals with the most severe disabilities as well as the transitions goal regarding may reduce profitability.

The overall purpose of the evaluation is to analyse the recruitment practices of Samhall. Special attention is paid to the potential for cream skimming. This is related to the difficulty of defining disability, and lack of stringent monitoring opens up the possibility of recruiting participants without a severe disability. Apart from cream skimming, Skedinger and Widerstedt also examine the duration dependence, e.g., whether individuals are more likely, given disability status, to enter Samhall as the unemployment period progresses. Such dependence may be due to the company's objective to act as an employer of last resort, but may also reflect incentives for using Samhall in a manner not intended by the Government. The employment security the company offers may shift preferences towards Samhall jobs as the unemployment period progresses. The recruitment practices and the potential for cream skimming are examined by analysing the determinants of the duration of unemployment until employment in Samhall, in general as well as conditional on participation in a programme for the disabled.

The data set used is taken from HÄNDEL, a database that contains information on every individual registered as unemployed at the public employment service office. Daily information about unemployment status is available from August 1, 1991. This information states whether the individual is openly unemployed, i.e., whether the individual can take a job immediately, or is participating in a labour market programme, and if so, in what type of programme. Some background information on each individual is also available. Additional information on the employment history and escape routes for the individuals in HÄNDEL who found jobs at Samhall was obtained directly from the company.

The subset used in this study is a sample of 10,000 unemployed persons with work disabilities. The data set consists of the unemployment histories of the selected individuals from January 1, 1992 to October 31, 1999. Unemployment spells that began before January 1, 1992 were omitted. After the exclusions due to errors and one unemployment spell that began before January 1, 1992, there were 8,849 individuals with 23,878 unemployment spells in the data set.

The first part of the study comprises the analyses of the determinants of the recruitment to Samhall. This part analyses the relative risk of leaving unemployment for a job at Samhall, given unemployment up to that time. The next part includes the estimation of the recruitment to Samhall conditional on participation in a disability programme, i.e., Samhall and subsidized employment, treating exits to the latter as censored observations. In the final part, the outside employment hazard for the subsample of Samhall employees is estimated.

A parametric Weibull baseline hazard with time-invariant covariates is specified for purposes of analysing unemployment duration until recruitment at Samhall. In order to account for unobserved heterogeneity Skedinger and Widerstedt assume that such effects have a Gamma distribution and enter the hazard function multiplicatively.

The findings indicate that the recruitment-to-Samhall hazards for persons with psychic or intellectual handicaps, who are included in the prioritized groups, are significantly higher than the hazards for some, but not all, disability groups. Furthermore, the results suggest that individuals without disabilities are recruited to the company, which is contrary to the guidelines.

The authors also report positive, but slight, duration dependence in the Samhall hazard, conditional on participation in a handicap programme. This result may be explained by Samhall's role as an employer of last resort, when all other possibilities for finding employment have been exhausted. Since the job security offered at Samhall makes employment there attractive, the finding could also reflect that Samhall jobs are used in a way not intended by the Government.

The results challenge the efficiency of Samhall but it is difficult to quantify the magnitude of these effects. Also, even if the quality of the data is high, there is a problem regarding the classification of different degrees of disability.

Conclusions from variations across countries

Supported employment and rehabilitation are poorly evaluated in Poland as well as in Sweden and probably also in many other countries. It is therefore impossible to make far-reaching conclusions with regard to this type of measure. The only evaluation study that exists for Sweden finds that purely in terms of employment prospects, the absence of a special program is better than any form of special assistance for disabled workers. However, this study seems to suffer from a too short observation period. Since many measures for disabled are long-term measures, potential success of such measures simply cannot be observed within the given time frame.

Another study for Sweden only allows for some indirect conclusions. It points to the fact that assignment to a sheltered workplace programme especially designed for supporting disabled in Sweden seems to extend to individuals who do not belong to the target group in the narrow sense of the term. This could reflect inherent dynamics of such programmes. Assuming that the “true” share of disabled in need of social support is constant and exogenous, the introduction of support programmes may induce an endogenous growth of the target group, which might affect the regular labour market in terms of crowding-out and substitution effects. Nevertheless, a mild work requirement for disabled may be important in order to keep eligibility claims from replacing unemployment insurance claims.

The risk of parking workers in disability programmes seems particularly strong in Poland. A survey by Golinowska (2004) indicates that 50 per cent of the participants in a rehabilitation programme were deemed able to work after re-examination.

4.4.7 Direct Job Creation (Ireland, Poland)

Ireland

The Community Employment (CE) scheme is the main direct job creation programme in Ireland; therefore, the information provided below relates to this specific scheme. Participation in the Community Employment (CE) scheme is not mandatory. The CE scheme is an employment and training programme with the objective of assisting long-term unemployed workers, and other disadvantaged people, to re-enter the active workforce. This is done through the provision of part-time and temporary placements in jobs based within local communities.¹²² Participants are allowed to seek other part-time work during their placement. After the placement, participants are encouraged to seek permanent part-time and full-time jobs elsewhere based on the new skills they have gained while in a CE scheme.

To participate in a CE programme, an individual must register with their local FÁS office, which is Ireland’s national training and employment authority, be in receipt of an Irish social welfare payment and meet eligibility criteria that are based on age and length of time in receipt of various social welfare payments. There are two CE scheme options, each with different criteria. The *Part-time Integration Option* is for people aged 25 and over who have received social welfare payments for one year or longer, and people aged 18 years and over who receive disability-related payments. The *Part-time Job Option* is for those aged 35 and over and who have received social welfare payments for 3 years or longer. Certain groups are eligible for both CE scheme options, e.g., travellers and refugees aged 18 and over.

The weekly rate for a CE worker based on 19.5 hours worked is as follows:

2011	
Category of Participant	Rate in Euros
Participant without dependants	€208
Participant with adult dependant	€332.80*
Each child dependant (full rate)	€29.80
Each child dependant (half rate)	€14.90

¹²² The CE scheme is mainly sponsored by voluntary organizations and public bodies involved in not-for-profit activities.

The weekly unemployment benefit rates for Jobseeker's Allowance (JA)¹²³ in 2011 are as follows:

Maximum rate in Euros for people under 25			
New and existing claimants	Personal rate	Increase for a qualified adult	Increase for a qualified child
Maximum rate	€188	€124.80	€29.80

Age	Personal rate	Increase for a qualified adult
18 - 19	€100	€100
20 - 21	€100	€100
22 - 24	€144	€124.80

whilst those for Jobseeker's Benefit (JB)¹²⁴ are as follows:

Average weekly earnings	Personal rate	Qualified adult rate
Less than €150	€84.50	€80.90
€150 - €219.99	€121.40	€80.90
€220 - €299.99	€147.30	€80.90
€300 or more	€188	€124.80

The work undertaken in a CE scheme is community-based (in voluntary or not-for-profit organizations) and is not in direct competition with labour market jobs; therefore, CE wages are not comparable to competitive labour market wages.

Very little research has been undertaken on the effectiveness of direct job creation schemes in Ireland. However, the evidence that does exist generally supports the negative findings that have been derived in most other countries, which is that direct job creation in the public sector has not been a successful Active Labour Market Policy (ALMP) tool for assisting unemployed individuals in securing permanent jobs in the regular labour market. The few studies that do exist are summarized below.

O'Connell and McGinnity (1997) examined the effectiveness of a direct employment scheme targeted at young¹²⁵ unemployed individuals' in Ireland. This scheme, known as Teamwork, provided temporary part-time employment in community-based work, together with personal and skills development opportunities. The analysis, which was carried out in the mid-1990s using a combination of post-programme survey¹²⁶ and school leaver survey data, investigated the short and long-term impacts of the youth direct employment scheme. The authors found that, relative to a control group of similarly unemployed individuals that did not participate in Teamwork, participants were more likely to be employed within two-months of leaving the scheme (i.e. the short-term), but not at 18 months (i.e., the long term). The results were found to be robust to selection bias. In terms of the short-term, the probability of employment was estimated to be 0.18 for Teamwork.¹²⁷ In comparison to other youth active labour market programmes, O'Connell and McGinnity (1997)

¹²³ Means-tested payment.

¹²⁴ Payment based on social insurance (PRSI) contributions.

¹²⁵ Aged 22 or less.

¹²⁶ Post-Programme Follow-up Survey, which was commissioned by the Irish Department of Enterprise and Employment (now known as the Department of Jobs, Enterprise and Innovation) and the European Commission. The survey was based on unemployed individuals that had exited a range of active labour market programmes between April and July 1992, and they were followed up in 1994, between 20 and 25 months after the programmes ended.

¹²⁷ The model predictions are based on a male, at a mean age of 18.7 years, with no qualifications, who had been unemployed for 4 months.

found that participants in specific skills training courses or in employment subsidy schemes enjoyed better employment prospects than those that participated in Teamwork or in general training in both the short term and the long term. These findings led O'Connell and McGinnity (1997) to conclude that labour market orientated programmes were more effective than programmes with weak linkages to the labour market, i.e., direct employment schemes or general training.

Denny, Harmon and O'Connell (2000), using data taken from the 1996 FÁS Follow-up Survey¹²⁸ and the 1994 and 1995 waves of the Living in Ireland Survey¹²⁹, assessed the impact of Ireland's main public sector job creation programme, the Community Employment (CE) scheme, on participants' employment prospects two years after leaving the scheme. The CE scheme is offered to long-term unemployed workers and other disadvantaged individuals, and its objective is to help these people get back into work.¹³⁰ In comparison to non-participants, Denny et al., (2000) found that the CE scheme had no statistical impact on its participants' employment prospects two years post scheme completion. This result held when Denny et al., (2000) focused on those in full-time employment only. Denny et al., (2000) also used a series of interaction terms to test for differences in the CE scheme's effectiveness by gender, age and unemployment duration. Apart from gender, no evidence of any difference in programme effect was found for the other two sub-groups that were examined. In relation to gender, the CE scheme was found to have no significant impact on the employment prospects of men two years post scheme completion, but it had a positive impact on women's probability of employment, although only at a marginal level of statistical significance.¹³¹ In addition to investigating participants' employment prospects two years post scheme completion, Denny et al., (2000) also analysed the wage effects of the CE scheme among those who work full-time. In doing this, Denny et al., (2000) found that the CE scheme had a positive impact on wages among those who had been unemployed for less than one year prior to programme participation (increased wages by 17.9 per cent) but the scheme had a negative impact among those who had been long-term unemployed (decreased wages by 25.8 per cent), which is the main group of workers that the CE scheme is designed to assist. All results were found to be robust to selection bias. Using the same data as Denny et al., (2000), O'Connell (2002) also found that the CE scheme had no impact on its participants' employment chances two years post scheme completion.

Fitzpatrick Associates and the Economic and Social Research Institute (2003) evaluated the impact of the CE scheme for those who participated in the scheme in 1999 and 2000. The authors employed similar data sources as Denny et al., (2000); however, they analysed the scheme's effectiveness at a different point in time, in terms of when people participated in the scheme (first few years of the 21st century instead of the mid-1990s) and when their employment chances were assessed, which was one year after programme completion. In spite of the study differences, Fitzpatrick Associates and the Economic and Social Research Institute (2003) drew the same conclusions as Denny et al., (2000), which is that the CE scheme did not, relative to non-participants, have a significant impact on its participants' employment prospects one year post scheme completion. This result held for both cohorts of participants examined, those who

¹²⁸ Post active labour market programme survey, which interviewed individuals that participated in fourteen training and temporary employment schemes: the individuals left their course/scheme between April and July 1994 and were interviewed approximately two years later (January to June 1996).

¹²⁹ The Living in Ireland Survey is a panel dataset that contains a wide range of information about labour market activities, among other things, for a nationally representative sample of households: the comparison group of non-participants was drawn from this dataset.

¹³⁰ There are two CE programmes in operation in Ireland: (i) the part-time integration option and (ii) the part-time job option. The part-time integration scheme has a maximum one year duration; however, depending on individual needs, this CE placement can be extended by another year. The part-time job option programme provides participants with part-time work placements of up to 6 years for individuals aged over 55 and up to 3 years for those under the age of 55.

¹³¹ $p < .010$.

participated in a CE scheme in 1999 and 2000. The results were not tested as to the effects of possible omitted variables and selection bias.

The consensus from the literature evaluating the effectiveness of direct job creation as an ALMP tool in Ireland is that the country's main public sector job creation programme, the CE scheme, is not an effective tool for assisting unemployed workers, specifically those who are long-term unemployed, in re-integrating into the labour market. The only positive result available in the literature relates to the short-term impact of a direct job creation scheme that targeted young people in the 1990s, a programme known as Teamwork. However, this programme was not found to be effective in the long term, i.e., 18 months post scheme completion. Furthermore, both specific skills training and employment subsidies were found to be more effective ALMP tools for assisting youth unemployed in finding work.

Poland

In the early 1990s, public works were perceived as a major method available for combating unemployment in Poland. Unemployment was increasing rapidly. There was no experience in dealing with that new phenomenon. The public and politicians were not prepared for that situation, which was dangerous for the entire economic transition. So the reaction based on the implementation of such a non-sophisticated but politically effective method as public works was understandable. It was, however, very inefficient from the viewpoint of the labour market. That was analysed in Góra et al. (1994). Since that time the role of public works has constantly been reducing. Table 4.10 presents the share of public works in total expenditure on ALMP since 1997.

Table 4.10 Expenditure on ALMP and Public works in Poland

Year	ALMP	Public	Public works
	PLN '000	Works	%
1997	1168,4	414,6	35%
1998	1241,8	334,7	27%
1999	1097,4	208,3	19%
2000	767,8	146,2	19%
2001	604,4	115,6	19%
2002	539,4	88,4	16%
2003	1357,6	297,1	22%
2004	1323,5	279,3	21%
2005	1905,3	294,3	15%
2006	2067,1	145,6	7%
2007	2544,6	178	7%
2008	3177,4	248,4	8%
2009	6204,8	330	5%

Besides public works, socially useful works started later as a second form of direct job creation.

By definition, direct job creation is not very efficient from the point of view of creating self sustainable employment. That is not really the goal of the policy. If it was, then it should be immediately reduced to zero and resources spent on those kinds of programmes should be allocated to other ALMP measures. Direct job creation is still in use since this measure gives us a possibility to temporarily employ those who for various reasons are hardly employable. They can be kept in contact with the labour market and socially included.

However, direct job creation may have well-known but unwanted side effects such as substitution of regular jobs, deadweight loss, and crowding-out effects. Moreover, the related jobs may also serve political purposes by:

- Treating the related workers as a free workforce in terms of costs;
- Using the related workers to do work from which somebody will benefit personally;
- Using the related workers as a way to get at local level additional financing provided through the central budget.

That political context should be kept in mind since it reduces the effectiveness applied of policy measures. However, such effects can hardly be measured or estimated. Of the three effects mentioned above the first two are more or less straight forward, while the third may require some explanation.

ALMPs are financed through the government-run Labour Fund. It is allocated locally according to (among other things) the scale of unemployment in certain localities. Having transfers from that Fund means the ability of local self-government bodies to finance expenditures that contribute to local prosperity or political benefits of the decision makers. Direct job creation is the most useful vehicle for that purpose. In that case, efficient use of the funds – if we mean ALMP efficiency – is not really welcome, since it reduces future flows of that financing.

The Bukowski study provides econometric evaluations of several types of ALMPs in Poland. A logit model (labour market flow analysis) is used on PLFS data. According to that econometric evaluation public works do not significantly increase the employment probability of participants.

The same study evaluates ALMPs by applying a propensity score matching method. This impact analysis is based on a survey sample. The PULS database (administrative data at county level) was used as the sampling frame for the survey study. The sample consisted of unemployed workers who entered ALMP programmes in the second quarter of 2006 (study group) and those who were registered as unemployed but did not participate in any ALMP programme as from the second quarter of 2006 until the third quarter of 2007 (control group).

Certain groups were excluded from the sample, i.e., workers who participated in more than one ALMP programme in the observed period and workers who reached retirement age. Information from PULS was complemented with other data. The sample was divided according to types of ALMP applied, namely business incentives, public works, intervention works, apprenticeship and on-the-job training and training courses. A simple random sampling without replacement was applied leading to a total sample size of 20,146 workers, 4,026 of whom were interviewed (1,493 from the study group and 2,533 from the control group).

According to the propensity score matching method, the net effect of public works on participation was even negative.

Conclusions from variations across countries

For Ireland as well as for Poland, the availability of evaluations on direct job creation in the public sector is quite unique. Being assigned to such a job is likely to decrease the job finding prospects of participants on the regular labour market. This is fully in line with numerous findings of previous literature reviews (e.g. Schmidt et al. 2001).

Substitution and crowding-out effects are often addressed as a key problem in the context of direct job creation. However, the available country studies for Ireland and Poland are not aimed at

quantifying these side effects. Accordingly, they also do not allow for an assessment of overall effects.

4.4.8 Start-up Incentives (Germany)

Promotion of unemployed with regard to start-ups has become more and more important in Germany during the last 20 years. While in 1986 only 5,600 unemployed got promoted, this figure grew to about 250,000 in 2005 (Caliendo/Kritikos 2009). Correspondingly, the proportion of previously unemployed among the entrepreneurs with a start-up incentive was only 1 per cent in 1986, but reached almost 50 per cent in 2005 (Caliendo/Kritikos 2009). This means that start-up incentives in Germany have become increasingly aimed at unemployed workers, contrary to the 1980s.

Historically, one has to distinguish between three different types of programmes. Before 2003, unemployed could be promoted through a subsidy called *Überbrückungsgeld* (bridging allowance), henceforth abbreviated by ÜBG. In 2003, a second subsidy was introduced, which was called *Existenzgründungszuschuss* (start-up allowance), referred to hereafter as EGZ. In the summer of 2006, ÜBG and EGZ were replaced by a new programme called *Gründungszuschuss* (start-up allowance), denoted by GZ in the remainder. GZ comes close to ÜBG. In fact, the introduction of GZ meant the abolishment of EGZ due to presumed low or even negative cost efficiency.

ÜBG and EGZ were subject to a large-scale evaluation initiative accompanying the labour market reforms of 2003-2005 in Germany (see Forschungsverbund IAB, DIW, GfA, sinus und infas 2007). No evaluation studies are available yet for GZ. However, as GZ comes very close to ÜBG, one may expect that its effectiveness compares to that of ÜBG. With regard to efficiency one might even expect some gains, since the take-up of GZ is now reducing the maximum duration of unemployed compensation, which was not the case for ÜBG and EGZ. Therefore, start-up failures are fiscally less expensive now than they used to be. However, one must take into consideration that take-up might have gone down even compared to ÜBG, since a larger share of the risk of failure has been shifted towards the beneficiary of the subsidy.

Each of the three instruments under consideration requires eligibility to unemployment compensation. A business plan approved by an external business expert is also mandatory. A third requirement is that the start-up generates the main source of income.

The level of individual ÜBG corresponded to the level of unemployment compensation, which is 60 per cent of the previously earned net income (63 per cent for households with children). An additional lump sum of roughly 70 per cent of unemployment compensation was paid. The maximum duration of ÜBG was six months. It was the responsibility of ÜBG claimants to insure themselves against risks of income loss.

The EGZ consisted of a series of lump sum payments with a maximum duration of three years. It amounted to 600 Euros per month during the first year. If the expected annual income did not exceed 25,000 Euros during this year, promotion could be prolonged for another year at a reduced monthly lump sum payment of 360 Euros. If the expected income in the second year of promotion again did not exceed 25,000 Euros, claimants could call for a final prolongation of EGZ with a monthly lump sum of 240 Euros per month. It was mandatory for EGZ claimants to be insured in social insurance.

During the period, when ÜBG and EGZ existed together, only one of both could be claimed at a time. Both instruments did not explicitly differ with regard to target groups. The choice between both instruments was more less a matter of preference. It could depend on time preferences, fiscal burden of a household and expected income from self-employment.

While receiving ÜBG or EGZ, claims on unemployment compensation paused without deduction. In case of a start-up failure, recipients of ÜBG or EGZ could just resume their remaining claim on unemployment compensation as it was when they started claiming ÜBG or EGZ.

When the GZ replaced ÜBG and EGZ in 2006, the maximum duration of promotion was fixed at nine months. The level of GZ is now practically the same as for ÜBG. In addition to the three previously mentioned conditions for claiming start-up subsidy, claimants now must also provide sufficient evidence of their ability and knowledge to run a business. A crucial change can be found in the introduction of a 1:1 deduction of the maximum duration of unemployment compensation for the period of GZ claims. Moreover, GZ claims can only be realized if the remaining maximum duration of unemployment compensation is at least 3 months. Only if the remaining maximum duration of unemployment compensation is less than 9 months, may claims on GZ prolong the maximum duration of transfer eligibility. However, claimants are allowed to insure themselves against unemployment through the public unemployment insurance at a reduced rate. If a claimant is able to prove intensive business activities after the GZ has expired, the claimant can apply for a follow up promotion of 300 Euros per month for another 6 months.

By and large, the GZ has much more affinity to the former ÜBG than to the EGZ. It may therefore be expected that its effectiveness is closer to that of ÜBG than to that of EGZ. However, one might also expect that the number of promotions will drop. This is easily confirmed empirically. When the EGZ was introduced in 2003, the overall number of promotions increased sharply, without reducing the number of ÜBG claimants. The number of GZ claimants in 2007 was even lower than the 2005 number of ÜBG claimants alone (Caliendo/Kritikos 2009). This gives rise to the interpretation that the introduction of GZ has not only deterred those individuals who previously would have claimed EGZ, but also part of those who formerly claimed ÜBG.

Evaluation studies on effectiveness and efficiency are available only for ÜBG and EGZ (Caliendo/Künn/Wießner 2010 and Caliendo/Steiner/Baumgartner 2007). They are based on a comparison of programme participants and non-participants in a quasi-experimental setting. Comparability of participants and non-participants is accomplished via a propensity score matching procedure.

The type of effect identified is the average treatment effect on the treated (ATET). The problem with these effects is that they do not necessarily transfer into aggregate effects of the same magnitude. On the one hand, substitution and crowding-out effects may occur, which could lead to a zero sum game on the aggregate level. On the other hand, surplus effects may occur, if self-employed create additional job opportunities that wouldn't have emerged otherwise. Neither effect is addressed in the available studies. Accordingly, the reported results are only useful if the ATET translates 1:1 into aggregate effects.

Table 4.11 provides an overview of the obtained results. Five years after programme entry, participants show a remarkably higher probability of employment than non-participants for both types of programmes. Differences between the two programmes seem to be of minor importance with regard to employment probability. As regards earned income, ÜBG appears superior to EGZ except for Women in East Germany. In terms of cost efficiency, however, EGZ shows a clear disadvantage compared to ÜBG. While ÜBG generates overall fiscal benefits, EGZ produces

sizeable net costs. This results from a combination of less earned income and higher programme costs compared to ÜBG. It also explains why EGZ was de facto abolished by the government in 2006.

Apparently, the effectiveness of start-up subsidies varies by socio-demographic factors for reasons that are not obvious.

Table 4.11 Effectiveness and Efficiency of start-up incentives in Germany five years after programme entry*

	ÜBG				EGZ			
	West Germany		East Germany		West Germany		East Germany	
	Men	Women	Men	Women	Men	Women	Men	Women
Employment probability (% point difference compared to non-participants)	17	20	23	26	21	14	25	29
Earned income (difference compared to non-participants in Euros per month)	777	283	672	302	443	148	491	347
Cost efficiency (€)	2,880	1,100	1,500	244	-5,440	-6,900	-5,360	-8,101

Source: Caliendo/Künn/Wießner (2010) and Caliendo/Steiner/Baumgartner (2007).

* Results refer to a point in time of 56 months after programme entry.

A widely unsolved problem in the evaluation studies consists of considering deadweight effects. This was one of the main arguments of the government when abolishing EGZ in 2006. Survey studies show that many self-employed who got promoted by start-up subsidies stated that they would have founded their business anyway. There may indeed be an incentive to register as unemployed before creating a business in order to qualify for the subsidy. This creates a selection problem, which may hardly be neutralized by a propensity score matching approach. A more conclusive identification strategy for evaluation would therefore have to investigate the success rate of subsidized start-ups compared to unsubsidized start-ups. However, there is no such study available for Germany, since the necessary type of treatment variation is not available due to a nation-wide introduction of the program.

To conclude and based on the available evidence, start-up incentives must be viewed as highly effective with regard to improving employment prospects, at least in terms of the ATET. However, this should not be taken as a charter for the promotion of start-up subsidies. Even though the number of self-employed has remarkably increased in Germany since the year 2000, which accounts for roughly half of the overall increase of employment in Germany in the same period, there is no evidence that this can be attributed to the increase in the promotion of start-up subsidies.

4.5 Conclusions

Almost all of the available evaluation studies aimed at identifying the causal impact of policy measures focus on average treatment effects on the treated. This is necessary to identify the contribution of a programme to its objective. But it also limits the scope of conclusions for several reasons. First of all, substitution effects and crowding-out effects are rarely considered. These studies also bear little evidence on the magnitude of deadweight effects, although this is often

mentioned as a problem in practice. Last but not least, the role of lock-in effects is often not addressed properly. The lock-in effect matters especially for training and for wage subsidies and the measured outcome is heavily dependent on the length of the available observation period. If too short, the measured outcome may appear as negative although it may actually be positive in the long run. Hence, there are obvious and general knowledge gaps with regard to the overall effects of active labour market policies.

One of the main conclusions for further progress must therefore be drawn with regard to policy implementation. We could know much more if policy implementation would stick closer to the concept of a learning process. This can be achieved by policy designs that use systematic variations of policy instruments in the spirit of controlled experiments. Good examples of this type of policy implementation can now be found in Denmark, e.g., Vikström/Rosholm/Svarer 2001, where the idea of systematically varying policies has become a principle of policy making in the domain of labour market policies. Such designs are often superior to ex-post and quasi-experimental evaluation designs, which do not only require large-scale data sets but also highly sophisticated econometric methods of impact evaluation, e.g. Card/Ibarrarán/Villa (2011) and also Schneider/Uhlendorff/Zimmermann (2011, 2012). The outcomes of policy designs in the spirit of experimental settings are also easy to communicate to voters, a value in itself, which is an important issue for policy makers as well.

Out-of-work income support

The findings in this chapter suggest that the **level of unemployment compensation** has a negative impact on re-employment probabilities. Some papers find only an insignificant impact in EU-15 countries on the continent as opposed to the UK, but these tend to be older. Since then, the quality of data or methods might have improved, but also benefit systems have been made less generous. The effects of benefit levels seem consistently insignificant in Spain, due perhaps to support by the family or to rapidly decreasing replacement rates. The evidence for Hungary is mixed, but one Hungarian study finds that negative effects exist in particular for the higher educated unemployed; an Ecorys (2004) overview indicates that disincentive effects of higher benefit levels generally tend to be smaller for vulnerable groups. This finding may seem at odds with the notion of an unemployment trap for low-wage workers, but re-employment rates for vulnerable groups are lower overall. Also, as UK studies from the 1980s have shown, re-employment rates become less sensitive to benefit levels as the unemployment spell lengthens, which is more likely to happen among vulnerable groups. All in all, the estimated effects of higher benefits on re-employment probabilities seem to depend on institutional settings and quality of data and methods, but are in general found to be negative, especially in later papers.

Studies for Austria and Spain also address the impact of **maximum benefit duration** on unemployment duration, confirming that the maximum duration of unemployment also has a negative impact on re-employment probabilities. Once again, the evidence from Hungary is not unanimous as regards the role of maximum benefit duration. The magnitude of the effects seems to be affected by the share of recall workers among the unemployed, which refers for example to construction workers temporarily dismissed at the start of winter (December or January) and hired again at the end of winter (February or March). Recall work is typically not very responsive to variations in benefit schemes. Hence, the larger the share of recall workers, the smaller the measured impact of benefit schemes on re-employment probabilities.

Finally, two UK studies published in 2009 on **job search requirements** indicate that these do reduce the number of unemployment benefit claimants, simply by terminating the benefits of those who cannot prove sufficient job search. Job search requirements do not seem to incentivise increased job search, however.

Nevertheless, a negative impact of unemployment compensation on re-employment does not mean that unemployment compensation should be abolished. It is rather a matter of trade-offs that have to be taken into account. Out-of-work income support provides insurance in a cost-effective way: without public unemployment insurance, individuals would have to insure themselves against the risk of losing their job. To achieve the same level of insurance by private savings, each individual would have to accumulate and retain savings that allow for covering a certain period of income loss due to unemployment, while a pay-as-you go system requires only a small but continuous contribution over the life-cycle reflecting the unemployment risk. One can only assume how much utility is lost by postponed consumption, but the Netherlands Bureau for Economic Policy Analysis uses an assumed loss of two-thirds utility for every per cent savings postponed during the entire working career (in studies of early retirement). This would mean that 3 per cent extra private savings to insure income results in a lifetime loss of utility of 1 per cent of the wage sum, or 0.4 per cent of GDP. The 0.4 per cent contribution of public unemployment insurance to lifetime utility needs to be compared with the avoidable part of unemployment benefits due to publicly insured benefits. Total spending on unemployment benefits amounts to roughly 1 per cent of GDP, of which at least 0.1 per cent of GDP is avoidable due to prolonged unemployment spells, and an unknown part is avoidable due to higher inflow into unemployment. Thus, evaluation studies do help in finding an estimate for the price that has to be paid for a certain increase in generosity. This price then has to be compared to the revenue of such an increase in terms of utility gains by consumption, higher wages, and job stability.

Optimum out-of-work income support is also a matter of job search incentives such as payment schemes depending on unemployment duration and job search activities. This typically goes beyond the scope of evaluation studies and is addressed in theoretical studies on optimum insurance design (e.g., Hopenhayn, /Nicolini 1997). The same applies to “countercyclical” stabilizers as in Coquet (2011)¹³² and Andersen and Svarer (2010)¹³³, where benefit levels are higher during crises to protect income and lower in times of growth to incentivize job search. Even theoretically, the countercyclical adjustments should be small. Andersen (2011)¹³⁴ argues “activation measures both serve to strengthen both job search and job acceptance, and to improve qualification and thus job finding rates.” Requirements to search and accept jobs are therefore considered necessary in a system of automatic stabilizers to minimize long-term unemployment.

Another economic rationale for unemployment compensation is that unemployed workers can search for a high-quality job match rather than taking the first job offer. Both issues, the insurance rationale as well as the matching rationale, call for optimality considerations, which are typically not an evaluation study subject. If anything, wages seem to decline rather than to increase as persons are unemployed for longer periods of time. At least, this is the case according to Hungarian evaluations, which show that subsequent wages are lower the longer persons are unemployed. This effect could be caused by unemployed workers with the best job prospects finding a good match quickly, while less advantaged unemployed remain having more difficulty to find a good job match. Until this is resolved in literature, little can be concluded on the effect of unemployment benefits enabling a search for better-quality job matches.

¹³² Coquet, B. (2011), Unemployment Insurance, What do we know and how do we use it? Thematic Review Seminar, Brussels, 7 November 2011.

¹³³ Andersen, T.M. and M. Svarer (2011), Business Cycle Contingent Unemployment Insurance, Nordic Economic Policy Review, 2, pp. 91-127.

¹³⁴ Andersen, T (2011), Unemployment benefits: incentives, insurance and automatic stabilizers - some Scandinavian lessons Thematic Review Seminar, Brussels, 7 November 2011.

In our view, the economic rationale to provide cost-effective public insurance against income loss alone is sufficient to warrant unemployment insurance. Also, there are the social rationales for equity and combating poverty to maintain unemployment insurance, as argued in Chapter 1.

Early retirement

Both in Italy and in the Netherlands, the available evidence confirms that early retirement schemes prompt older workers to leave the labour market earlier than otherwise. However, early retirement schemes do not in turn provide employment options for young outsiders of the same magnitude. These findings are in line with a Gruber et al. (2009) overview study. The lack of beneficial effects makes early retirement programmes extremely costly.

Labour market services

The notion of labour market services is quite different between countries and depends on the role of the public employment services (PES). In countries like the UK, PES comprise the whole set of activation policies for job seekers, including training, wage subsidies and the like besides a more narrow focus on counselling, job search assistance, and monitoring. In these countries, counselling and job search assistance are often packaged with other measures, which sometimes makes it difficult to disentangle the specific contribution of each policy instrument to the overall effect of activation. Austria and Germany as well observe the more restricted notion of the tasks of PES, which is also behind the definition of PES in this report. The Netherlands is somewhere in between. Administration is another function of labour market services in all EU Member States. Providing information services on job vacancies to job seekers is a third task of public employment services; however, this task has not been evaluated with regard to (cost-) effectiveness.

For the three countries for which the effectiveness of labour market services has been reviewed, counselling and job search assistance appear to increase the re-employment probabilities, but not in general. The Dutch findings indicate that counselling and job search assistance may reach its limits in times of economic crisis, as also observed by Eurofound (2010).¹³⁵ Moreover, the effects are likely to be small. The findings of generally positive but not always significant impacts of counselling and job search assistance are in line with findings of Kluve (2010) and Card/Kluve/Weber (2010).

However, as the Austrian and Dutch examples show, they may still be cost-efficient because job search assistance measures are often relatively cheap. Also, Canoy et al. (2011)¹³⁶ indicate that in Belgium and Poland the outflow rate out of unemployment is rather stable through the business cycle; the unemployment rate increases rapidly through a high inflow in times of crisis and decreases when the economy picks up because the outflow rate out of unemployment stays high while the inflow declines again. So even if job search assistance is not very effective in times of crisis, the assistance should arguably be continued because it need not cost much and it keeps workers in the habit of searching for jobs that must arrive sooner or later, to prevent long-term unemployment. OECD (2010) concluded that this function of job search assistance is especially important for vulnerable groups.¹³⁷

Even intensive job counselling can be effective, as Van der Heul (2006) showed for the Netherlands. An increase in counselling leads to 5 per cent more jobs two years after the start of the unemployment spell. Some other authors find even higher effects, but those other studies often assume that the impact of a programme on the exit rate out of unemployment remains constant

¹³⁵ Financing and operating active labour market programmes during the crisis, background paper 2010, Eurofound.

¹³⁶ Canoy, M. et al. (2011), Performance Targets for ESF Operational Programs, Ecorys.

¹³⁷ Responding to the crisis while protecting long-term growth, going for growth Chapter 1 OECD 2010.

over time. Authors that explicitly take account of a negative initial effect (the lock-in effect of people not working while in or waiting for the programme) and a positive post-programme effect tend to find lower impacts. The Austrian and Dutch studies show that counselling is more effective for women than for men and Dutch studies find that counselling is similarly more effective for ethnic minorities. A tentative explanation could be that counselling tends to focus on formal job applications, which might be less common practice among women and ethnic minorities. It stands to reason that counselling is less cost-effective for groups who could easily find a job on their own (deadweight loss). Indeed, a calculation for the Netherlands showed that it is cost-ineffective to offer workers with an average 50 per cent probability of finding a job without help within six months, intensive counselling before six months have passed. Because the probability of finding a job decreases over time, the deadweight loss of programmes also decreases over time, and counselling is already cost-effective for the unemployed worker with average characteristics after six months of unemployment.

Whether in a crisis or in regular times, a Commission background paper (2010)¹³⁸ highlights that employment services using coaching and self-reliance as a cornerstone of programmes tend to be most effective. There are no academic studies on the effectiveness of such a cornerstone, but this might possibly be attributed to difficulties of measuring the use of coaching and self-reliance as opposed to intensity (hours per week), duration and expenditures. Experiments with different approaches in different regions might yield the definitive answers that research is currently unable to provide on this.

The Eurofound (2010) report adds that job search support should be done combining the services with sanctions on out-of-work income support. However, Van den Berg and Van der Klaauw (2006) argue that the cost of monitoring is too high when few job opportunities exist and most unemployed want a job as quickly as possible, see also Section 1.4. When the concern pertains to informal work, offering directly created jobs at minimum wages to those suspected of informal work might be more effective; see also the discussion on directly created jobs below.

Another observation is that job counselling can improve the effectiveness of other measures, most notably if it follows up a training programme. In the UK, labour market services are often dealt with in New Deal packages. These packages generally increase re-employment rates, but are generally not cost-effective. Only the New Deal packages for older workers and disabled workers is cost-effective as a whole; however, the effect of counselling within that package is impossible to isolate.

What the reviewed studies did not take into account is that counselling may improve not only the rate at which jobs are searched and accepted, but also the quality of the job match. According to an effectiveness study of Crepon et al. (2005) this is a key feature that renders labour market services effective; see also Chapter 1.

Therefore, we draw the overall conclusion that job counselling is generally effective and even cost-effective, but should be postponed slightly for unemployed workers with good job prospects to avoid deadweight losses.

Other aspects of public employment services relate to the administration of (active) measures and how they are organized. Putting administration of active measures in the hands of social security funds saves a few per cent on staffing costs. Other administrative issues relate to providing services in-house or outsourcing them to private providers. Dutch studies show that if private

¹³⁸ Active labour market policies for the Europe 2020 strategy, ways to move forward, background paper.

providers are given a short leeway, the risks of cream-skimming and parking are negligible. All in all, the organization of administration does not seem to decisively influence the cost effectiveness of labour market services.

Training

Training appears to have a positive impact on the re-employment of participants in Germany as well as in Ireland, if at least two years since the start of the programme are observed. In both countries, there is also little or no evidence with regard to the role of socio-demographic variables. However, there are differences too. For Ireland, there is strong evidence that the provision of training is only effective if it is related to professional skills rather than general training.

The finding of little difference in effectiveness of training for older and younger workers is at odds with the findings of the Kluve papers that training is particularly less effective for younger persons, but again this could be explained by a difference in specific focus on mid-term effects. The Eurofound (2010) paper also indicates that youth have not been successfully supported through training during this crisis. This is at odds with the conclusion in the same paper that previous training evaluations have found that it may take up to two or three years to see a benefit from training programmes. We therefore conclude that effects of training need to be analysed in the midterm, in which case differences between age groups are not evident.

The relevance of programme focus on professional skills may also explain the weak impact of training according to the findings of the quantitative meta-studies by Card/Kluve/Weber (2010) and Kluve (2010). They do not distinguish between general training and work-related training and find evidence both for positive and negative impact, which results in an average impact close to zero. Another explanation is that effects of training tend to show up in the midterm due to initial lock-in effects and in this chapter greater weight is attached to evaluations of mid-term effects.

Van der Heul (2006) found that the effectiveness of training increased for older workers in a time of increasing unemployment in the Netherlands in 2003. At that time the majority of unemployed not only found a new job, but even a new job in a different sector. This makes sense from the viewpoint of an economic crisis having a cleansing effect: workers lose jobs in unviable occupations and need to be trained for new occupations.

The potential effectiveness of training, if not too short and aimed at skills needed in the labour market, does not in itself imply that training is also cost-effective. Training does come with costly lock-in effects: people do not work during their training. So the gain in employment prospects, does not necessarily pay off fiscally. However for Ireland we are able to make a cost-benefit comparison including costs of lock-in effects. In Ireland, the costs are roughly 7,000 Euros for a training programme and roughly 10,000 Euros for out-of-work income support. The Exchequer would net a positive result from 10 years of saved expenditures on benefits and income tax revenues if training created 8 per cent additional jobs or more. Given that the lowest effects estimated for vocational training in Ireland indicate 14 per cent more additional jobs in the long run, we may conclude that vocational training is cost-effective in Ireland, especially since the Irish (and German) studies differentiate between effects in the short run and the long run.

To further improve the cost effectiveness of training, bearing in mind the lock-in effect, training should in general not be offered in the first few months of unemployment, when many unemployed find a job on their own.

Employment incentives

In Spain as well as in Italy, the objective of employment incentives is to increase the share of permanent contracts rather than to increase overall employment. These incentives have small but positive effects on the share of permanent jobs, particularly for young workers (Spain) and well educated young workers (Italy). However, the results, especially for Italy, show that there has been no effect in terms of an overall increase of employment, making such programmes very costly.

Italy has implemented a peculiar form of employment incentives. It is related to the eligibility for unemployment compensation. Companies that hire unemployed workers may claim 50 per cent of the workers' unemployment compensation until exhaustion. Older workers have the longest benefit durations, but for older workers the negative effect of being eligible for longer lasting benefits on re-employment dominates the positive effect of a larger employment incentive for their next employer.

In Hungary, as in many other countries, wage subsidies are designed for purposes of increasing re-employment rates. However, this incentive, which was made available to companies for hiring workers who were unemployed for at least six months, had no effect or even a negative effect in Hungary in the mid 1990s, possibly because employers actually waited until workers were unemployed for six months before hiring. A recent Hungarian survey indicates that half of the unemployed job finders would have been recruited even without the subsidy. The risk that employers substitute workers with subsidized workers has not been quantified in any study or other review study we are aware of.

The heterogeneity of employment incentives may also be responsible for the mixed findings in the quantitative meta-studies by Card/Kluve/Weber (2010) and Kluve (2010).¹³⁹ Although they are found to have a significantly positive impact according to the study of Kluve (2010), they are found to have a significantly negative impact according to the study by Card/Kluve/Weber (2010).

If anything can be concluded from these mixed results, it is that the design of employment incentives is crucial. A possible solution to reduce the risk of deadweight loss is to limit the employment incentives for the long-term unemployed who have proved they cannot find a job quickly without help, if long-term is at least 12 or 24 months rather than six months, as can be learned from the Hungarian experience. A particular potential risk of employment incentives is that employers substitute workers with subsidized workers: however, no study has quantified this risk. Nevertheless, it seems advisable that this potential risk be addressed, for example by placing conditions on employers or by granting employment services the discretionary decision to refuse the subsidy if they suspect substitution practices.

Supported employment and rehabilitation

Supported employment consists largely of sheltered work primarily aimed at engaging disabled workers in meaningful activities and outflow to a regular job is often regarded as a bonus. It is telling that in Sweden the outflow from sheltered workplaces into regular jobs is targeted at a low 3 per cent per year. Rehabilitation does have the objective to increase re-employment in regular jobs.

Supported employment and rehabilitation are both poorly evaluated in Poland as well as in Sweden and probably also in many other countries. Nor do overview studies exist for this type of measure. It is therefore impossible to make far-reaching conclusions with regard to this type of measure.

¹³⁹ According to their definitions, private sector incentive schemes are also including start-up subsidies.

For sheltered workplaces with the primary objective to engage disabled workers in meaningful activities, the main criterion for effectiveness is that participants are truly disabled. A Swedish study indicates that a sheltered workplace programme seems to extend to individuals who do not belong to the target group in the narrow sense of the term. A Polish study indicates that the risk of “parking” workers is particularly high in that country; a survey by Golinowska (2004) suggests that around 50 per cent of the disabled in a rehabilitation programme were deemed capable for work.

The only evaluation study on job placements through rehabilitation in Sweden finds that all forms of rehabilitation have negative effects on the re-employment rate. However, this study possibly suffers from a too limited observation period. Since many measures for disabled are long-term measures, potential success is simply not observed within the given time frame. The Polish review also indicates that rarely are subsidies sufficiently high to overcome the reluctance of employers to hire disabled workers, and that quotas merely result in hiring marginally disabled workers.

As regards sheltered workplaces, a mild work requirement for disabled may be recommended for Sweden in order to avoid the possibility of eligibility claims replacing unemployment insurance claims. The risk of parking is far more serious for Poland and strict budget limits per municipality might need to be considered.

With respect to rehabilitation, the negative findings for Sweden and Poland are not necessarily representative for other countries. There is no international overview study on rehabilitation, but rehabilitation in a package with employment services has been discussed in subsection 4.4.3 on labour market services. We can also use an overview of Dutch effectiveness studies on rehabilitation.¹⁴⁰ For the UK, one study finds that rehabilitation costing 3,400 pounds sterling per participant increases the re-employment rate by 17 per cent, resulting in a net benefit to the Exchequer of 1,300 pounds sterling per participant, whilst the other study finds a net benefit to the Exchequer of 1,300 pounds sterling per participant. Two explanations offered for this positive finding are that disability claims are a large spending group and that programme participation is voluntary: the reach may be small but those who do participate may be motivated to find a job. The Dutch overview finds only 2 percentage points more re-employment for partially disabled workers and 7 percentage points more re-employment for fully disabled workers. However, respective re-employment into full-time jobs is 12 and 8 percentage points less for programme participants, and disabled in part-time jobs still claim benefits for their unemployed hours. Factoring in the high average cost of 8,000 Euros and the maximum disability benefit duration of two years for new claimants since 2005, rehabilitation is obviously not cost-effective in the Netherlands.

Direct job creation

Ireland and Poland are two exceptions to the scarcity of evidence on the effectiveness of direct job creation. Being assigned to such a job is likely to decrease participants’ job finding prospects on the regular labour market. This is fully in line with numerous findings of previous literature reviews (e.g., Schmidt et al. 2001), and also with the quantitative meta-studies by Card/Kluve/Weber (2010), Kluve (2010) and Eurofound (2010).

Substitution and crowding-out effects are often mentioned in evaluations as a key problem in the context of direct job creation. These effects tend to occur in a macroeconomic equilibrium and are nearly impossible to quantify. This is a shortcoming of the Irish and Polish studies, but Kluve (2010) notes that “Potential general equilibrium effects are usually not taken into account.” Based on outflow rates, the Netherlands Bureau for Economic Policy Analysis concluded in 1998 that public

¹⁴⁰ Tempelman, K., C. Berden and L. Kok (2010), *Kosten en resultaten van re-integratie (Cost and results of activation)*, SEO.

works have a considerable lock-in effect and that low-productivity public works crowd out scores of regular jobs: the expenditures on wages can easily amount to only a small portion of the total cost of total lost production.

Cazes' (2009) argument that public works programmes may reduce poverty in areas hit hard by a crisis,¹⁴¹ is not very relevant to the EU where alternative measures are preferred, considering direct job creation provides a disincentive to job seeking behaviour. This argument of Cazes seems more applicable to other parts of the worlds, where poverty is more extreme and less alternative measures exist.

Wage levels of directly created jobs are another crucial issue, which many of the available studies do not take into consideration. At least from an economic point of view it must make a difference to what extent the salary of a publicly created job relates to available out-of-work benefits. The higher the salary exceeds out-of-work benefits, the less likely it is for a worker to move out of such a job, because it is more difficult to find a better paid job on the market.

However, directly created jobs may also be used in a different way. For instance, they can be offered at minimum wages to welfare recipients suspected of working in the hidden economy. Directly created jobs in the spirit of the workfare concept (see, e.g., Bonin/Falk/Schneider 2008) are rarely found in practice, but seem to be highly efficient if implemented (see, e.g., Schneider/Uhlendorff/Zimmermann 2001; 2012).

Start-up incentives

Germany is quite unique in devoting a large share of resources to start-up incentives; 0.1 per cent of GDP averaged over 2003-2008; only Spain approaches this figure with 0.07 per cent of GDP. Possibly for this reason, hardly any overview studies cover start-up incentives and their effects. However, the German evidence is supported by some recent Dutch evaluation studies.

Based on the available evidence for Germany, start-up incentives must be viewed as highly effective with regard to improving employment prospects, at least when participants and non-participants are compared at the micro level. However, this should not be taken as a charter for the promotion of start-up subsidies. Even though the number of self-employed has remarkably increased in Germany since 2000, which accounts for roughly half of the overall increase of employment in Germany in the same period, there is no evidence that this can be attributed to the increase in the promotion of start-up subsidies.

Firstly, deadweight effects are still an issue. There is some evidence that business starters register as unemployed in order to qualify for the subsidy, which they would not have done otherwise. But they might have established their business even without the subsidy. This makes it difficult to find an adequate reference group.

Secondly and more importantly, Germany offers start-up incentives to a selected group. As a requirement for income support for business start-ups, the starters must pass an entrepreneurial qualification test. This requirement, but also the risk of failing in business, implies that the reach of start-up incentives will be limited. If start-up incentives were too easily accessible, this would involve the risk of providing unemployment benefits without the requirement of searching for a job.

¹⁴¹ Labour Market Policies in Times of Crisis, Employment Sector Working Paper No 35, 2009, ILO 2009.

Overall, start-up incentives seem to be effective in helping a selective group of workers into self-employment. Whether start-up incentives are cost-effective is hard to tell, especially because a comparison group is hard to formulate. Because entrepreneurs are a selective group, it is difficult to compare them to average beneficiaries. But it is also difficult to make a comparison between supported self-employed and regular self-employed, in the first place because of the support the former group receives. But also because regular self-employed may start a new business after the first one fails, whereas this may generally not be the case for supported self-employed.

Whilst some German studies seem to indicate that start-up incentives are not only effective but also cost-effective in helping persons out of benefits, these studies do not include the cost of business loans not (fully) paid back if the business fails. A Dutch study by SEO (2008), however, indicates that even including these costs, start-up incentives are cost-effective for unemployment beneficiaries and another Dutch study by Ecorys (2011) indicates that start-up incentives are cost-effective for social assistance beneficiaries as well. On the other hand, start-up incentives are offered more selectively in the Netherlands, and deadweight losses are not taken into account in either Dutch study. The Dutch study did include an effect of self-employed creating other jobs, however this is not necessarily an additional advantage of promoting entrepreneurship over salaried jobs, since the recruitment of an employee may also result in additional job creation for management or support staff.

Overall conclusion

According to our findings, there is not one particular policy measure that might serve as a universal tool for improving the labour market prospects of participants. There is not even a clear champion among the eight types of measures being considered here. Only one scheme seems to have little or no merits: early retirement schemes are costly without creating additional employment prospects for younger workers. Each of the remaining measures have specific merits, but also specific shortcomings.

Out-of-work benefits prolong unemployment durations and increase the number of entries into unemployment. Yet out-of-work benefits are still very valuable as a cost-effective means to insure workers against loss of income because private savings would result in a great loss of utility due to long postponed consumption.

Job counselling is generally cost-effective in itself and more so for vulnerable groups. It can also enhance the effectiveness of training. Training is effective as long as they provide vocational skills that employers demand and if they are not short courses. Vocational instead of general training seems to be the key factor, rather than the group who receives training.

Employment incentives tend to come with a large deadweight loss which means that unemployed workers would have found a job without the subsidy as well. The same seems to apply to start-up incentives. Moreover, there is the risk that employers replace non-subsidized workers with subsidized workers or wait until job seekers become eligible for subsidies, or that supported business starters displace regular starters. Supported employment and direct jobs do not contribute to the outflow into regular jobs. The rationale behind these measures is rather to engage persons in useful activities.

Improving the effectiveness of each of these measures requires a systematic strategy for implementation. Policy implementation following the concept of a learning process calls for policy designs that use systematic variations of policy instruments in the spirit of controlled experiments. This would clearly allow for reliable conclusions, which enables policy makers to distinguish between what works and what does not.

5 Measures of the 2009 recession and later

5.1 Introduction

During the economic crisis starting in 2008, a number of additional measures were taken by the EU Member States both to prevent unemployment and to support those who had become unemployed. In many countries, existing measures were expanded and in some countries new measures were created.

This chapter aims to answer the follow five questions regarding the employment measures in place since the economic crisis:

1. How do countries perform on key unemployment indicators in 2008 and after?
2. What are the active and passive policies in 2008 and later?
3. What policies were changed in 2009 and later?
4. What policies were abandoned in 2009 and later?
5. What preliminary assessments can be made of these measures?

Although economic growth recovered in many Member States in 2010 and the start of 2011, the latest financial figures indicate the crisis is far from over. In many Member States the crisis has caused higher rates of unemployment, especially amongst vulnerable groups.

Previous crises resulted in structural reforms of labour market measures, but structural reforms in response to the post-2008 crisis seem to have been largely absent.¹⁴² There is more evidence of continuing structural change from before the crisis (especially the merging of employment services with unemployment benefit providers) as well as indications of some future reforms, most notably of early retirement (and pension systems), but otherwise very little restructuring of the provision of active and passive measures has taken place so far.

Before providing an overview of the passive and active measures taken by the Member States, the following pages provide an overview of the impact of the crisis on employment.

5.2 Indicators of the crisis in 2008 and later

The impact of the economic crisis since 2008 has manifested itself across Europe via reduced economic growth and increased unemployment rates. According to the Eurostat Labour Force Survey, the unemployment rate in the EU-27 increased from a year average of 7.1 per cent in 2007 and 2008 to 9.1 per cent in 2009 and 9.7 per cent in 2010, with a peak of 10.2 per cent in the first quarter of 2010. Still, in many EU countries unemployment rates had been higher in 1993. From the last quarter of 2008, especially the lower-skilled and younger workforce were hit by increasing unemployment rates. At a global level, the OECD confirmed that the impact of the crisis on labour markets peaked at different times due to the “unusually synchronized” onset of the recession.¹⁴³ As a result, unemployment did not peak simultaneously across all Member States, and some countries are still experiencing an increase in unemployment, especially amongst vulnerable groups.

¹⁴² Responding to the crisis while protecting long-term growth, going for growth Chapter 1 OECD 2010.

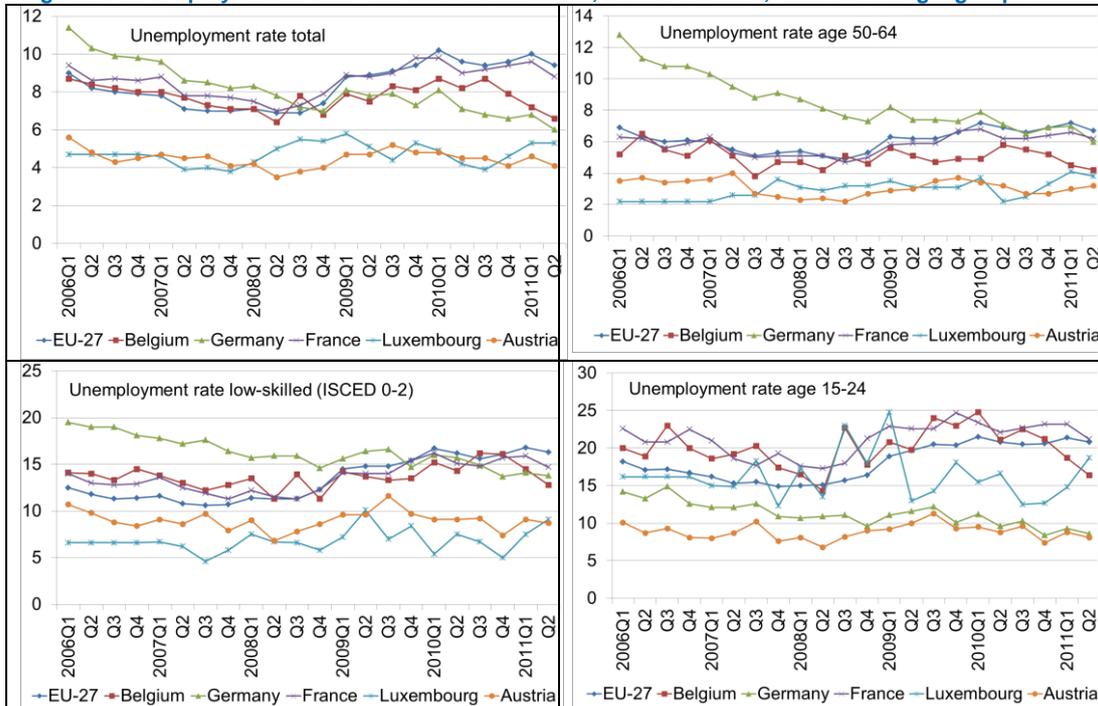
¹⁴³ OECD Employment Outlook page 21.

The following pages present the unemployment rate of youth, the lower skilled and older workers, defined in this study as the age group 50-64, in comparison to the overall unemployment rate, demonstrating the differences in peaks between the countries.

Continental countries

Unemployment rates were already declining before 2008 and continued to decline in 2008 and later in Germany, and were relatively stable in the other Continental countries, for most categories.¹⁴⁴

Figure 5.1 Unemployment rates in Continental countries, 2006-I to 2011-II, total and 3 target groups



Mild unemployment reactions to changes in GDP are a structural trait of Continental countries. Canoy et al. (2011)¹⁴⁵ found that only 15 per cent change in GDP growth in 1985-2008 translated into a change of employment growth in Continental countries, compared to 40-50 per cent in other EU countries, and 50 per cent in the US according to Okun in 1962. According to the OECD, the 2009 crisis was characterized by labour hoarding in Germany and other countries.¹⁴⁶ This labour hoarding is indicative of a high level of employment protection. Short-time work measures seem to have increased employment resilience,¹⁴⁷ but the mild reaction is more structural than can be attributed to short-time work measures. As mentioned above Figure 5.2, unemployment rates were also more stable than in the EU-27 for most categories, which could indicate that the higher degree of employment protection in the Continental countries applies to all groups of workers.

Nordic countries

The workforce was affected in all of the Nordic countries - Denmark, Finland, the Netherlands and Sweden - but the overall unemployment rate remained under 10 per cent per cent throughout the

¹⁴⁴ Data for the low-skilled unemployment rate in Luxembourg for all of 2006, q3 of 2007, q1, 3 and 4 of 2010 were indicated to be unreliable by Eurostat. Similarly, all data except for 2008 q3 and 2009 q1 and q4 were unreliable for youth, and all data for the older workforce was unreliable, with estimates of 2007 q1 and q3, 2008 q4 and 2009 q3 & q4.

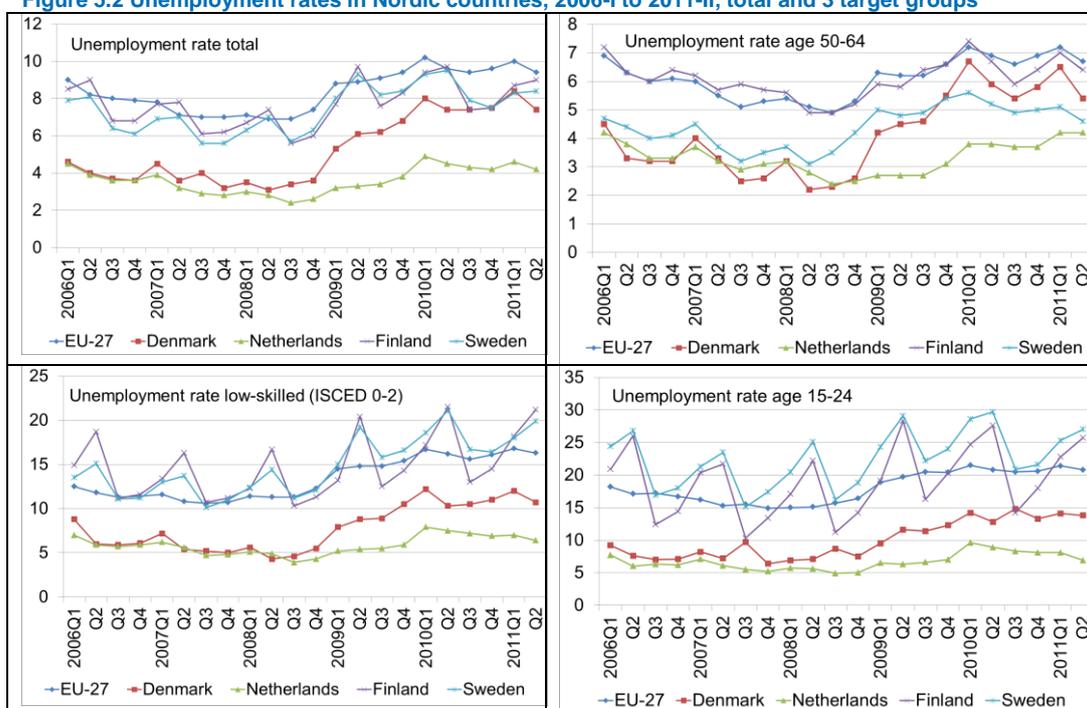
¹⁴⁵ Canoy, M. et al. (2011), Performance Targets for ESF Operational Programs, Ecorys.

¹⁴⁶ OECD Employment Outlook 2011 pg23.

¹⁴⁷ Hijzen, A. and D. Venn (2011), The Role of Short-Time Work Schemes during the 2008-09 Recession, OECD Social, Employment and Migration Working Papers, No. 115, OECD Publishing.

crisis.¹⁴⁸ Yet, despite these low figures in comparison to other groups of countries, it is noticeable that youth and the lower skilled reached significantly high unemployment rates in Sweden and Finland. The seasonal peak in the unemployment rates of low-skilled and young workers in the second quarter further indicates an insider-outsider problem, especially for youth and likely for migrant workers as well.

Figure 5.2 Unemployment rates in Nordic countries, 2006-I to 2011-II, total and 3 target groups



In all Nordic countries unemployment rates did not start to increase until 2009 and the total unemployment rate started decreasing by 2011. The OECD confirmed that the rise in unemployment rates was delayed in some cases and that in most cases the period of unemployment was shorter than in previous crises, most notably those of 1973, 1979 and 1990. The OECD attributed this shorter period of high unemployment to the 'large fiscal stimulus packages' and the 'very strong measures...to stabilize financial markets', by Nordic countries as well as other OECD countries.¹⁴⁹

Mediterranean countries

Some of the highest unemployment rates across the Member States are found in Spain which has held the highest overall unemployment rate since 2009 around 20 per cent and even higher rates for youth and the lower skilled. Youth unemployment rates crossing 45 per cent since 2011 compared to 15 per cent for the older unemployed seem indicative of a strongly segmented labour market in Spain.

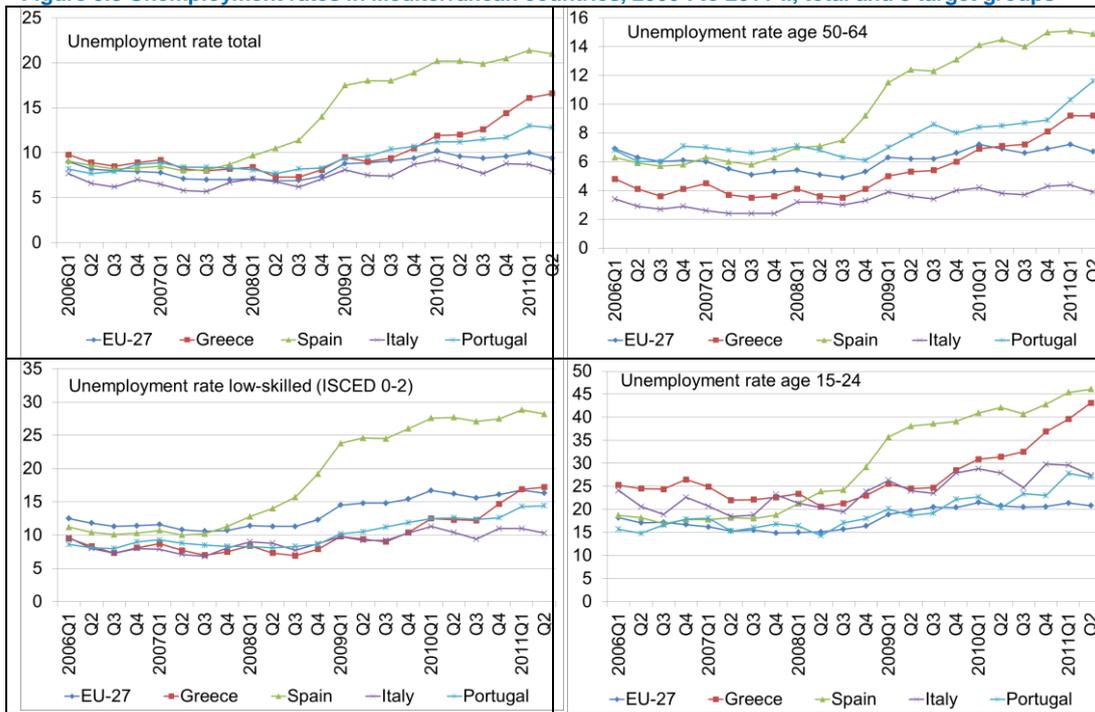
Although overall unemployment has risen above 10 per cent for Greece and Portugal¹⁵⁰ since 2009, the extremely high level of unemployment rates in Spain have not occurred in the other Mediterranean countries. Italy in particular only reaches above EU averages for youth unemployment (at 30 per cent) with a noticeable low unemployment rate for lower-skilled workers at 10 per cent.

¹⁴⁸ There was a break in the series of 2007 quarter 1 in Denmark and of 2010 quarter 1 in the Netherlands.

¹⁴⁹ OECD Employment Outlook 2011.

¹⁵⁰ There was a break in the series of 2011 quarter 1 in Portugal.

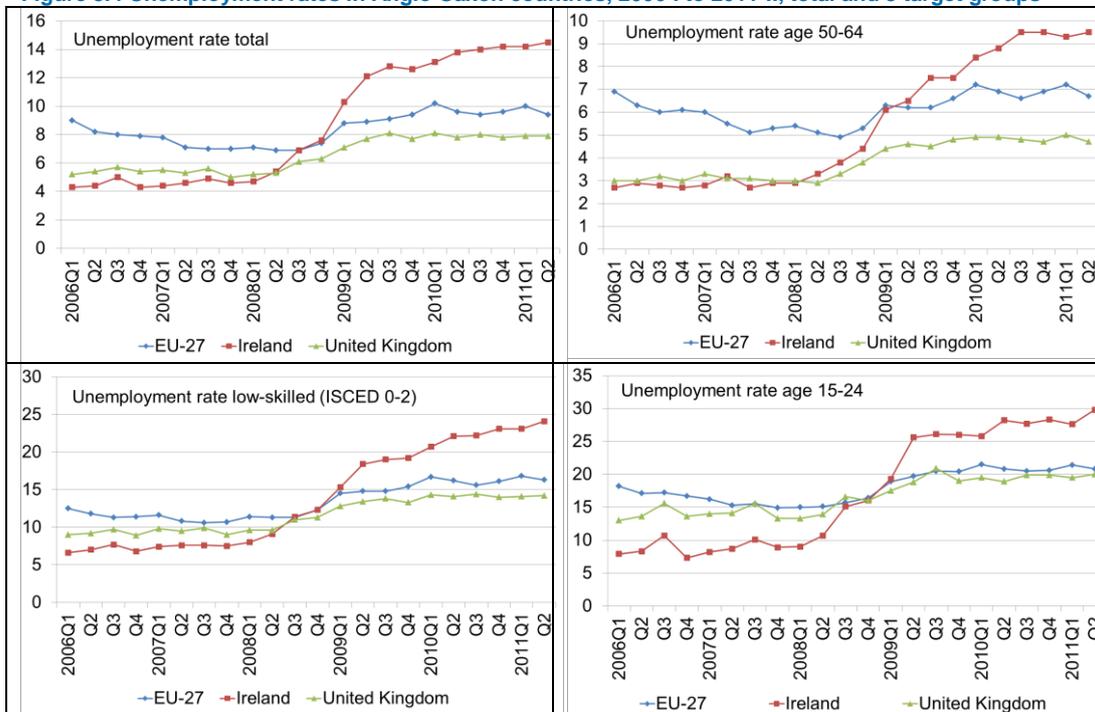
Figure 5.3 Unemployment rates in Mediterranean countries, 2006-I to 2011-II, total and 3 target groups



Anglo-Saxon countries

The UK¹⁵¹ and Ireland have had varying impacts of the crisis, with unemployment rates that in the UK remained stable after an initial increase in 2008 and in Ireland already started to increase in 2008 rising all the way through 2011 to levels well above the EU average in all categories.

Figure 5.4 Unemployment rates in Anglo-Saxon countries, 2006-I to 2011-II, total and 3 target groups



¹⁵¹ There was a break in the series of 2011 quarter 1 in the UK.

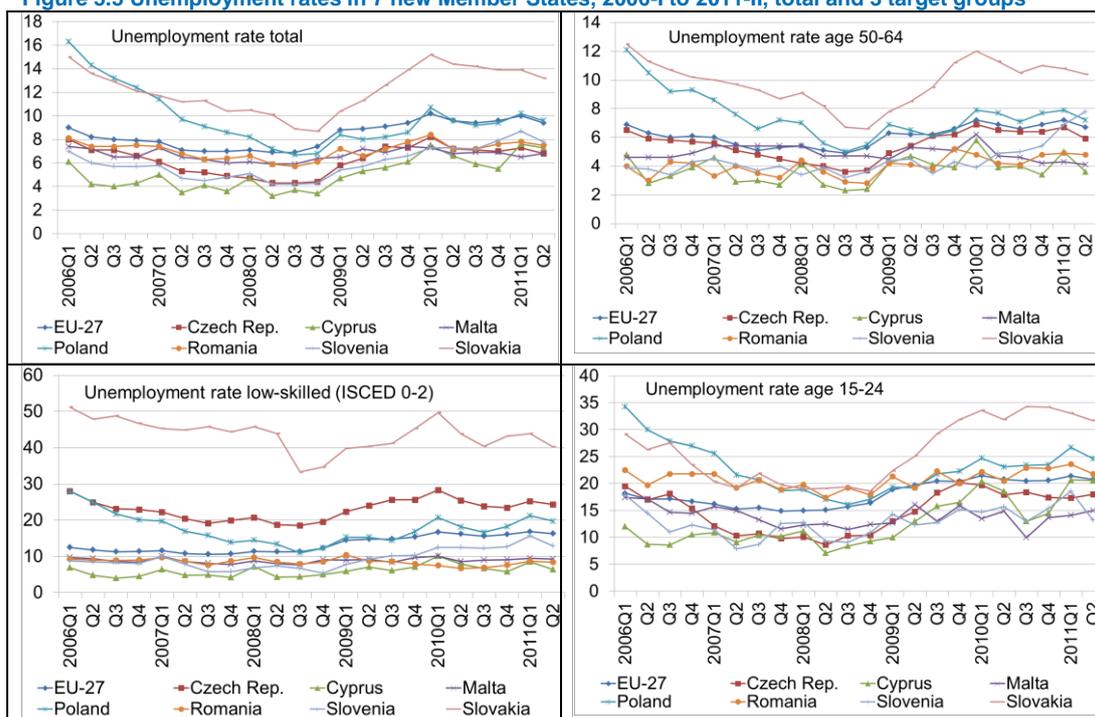
Unemployment of youth and lower skilled specifically peaked above 20 per cent in Ireland and both continue to grow progressively, with youth unemployment reaching a rate of 30 per cent in 2011.

New Member States

For ease of viewing, the New Member States have been divided into two groups based on the increase in unemployment in comparison to 2006. Group 1 comprises Cyprus, the Czech Republic, Malta¹⁵², Poland, Romania, Slovenia¹⁵³ and Slovakia, where unemployment rates have either decreased or moderately increased. Group 2 comprises Bulgaria, Estonia, Latvia, Lithuania and Hungary, which all have increased unemployment rates since 2006.

In group 1, Slovakia's unemployment rates rose most, particularly due to youth unemployment. Unemployment rates among the low-skilled are high in Slovakia and to a lesser extent in the Czech Republic. These two countries have the lowest share of low-skilled workers among the population aged 15-64 in the EU-27, amounting to 15 per cent as compared to 70 per cent for the medium skilled population; the EU averages are 30 per cent and 46 per cent respectively. This could have the effect that in these two countries more medium-skilled workers work in low-skilled jobs than in other countries, coming with a particular risk of social exclusion of low-skilled workers in these two countries, as further indicated by the high unemployment rates of low-skilled workers in these two countries. Cyprus and Malta on the other hand, barely noted any impact of the crisis and remained steadily under 10 per cent for all groups except for youth.

Figure 5.5 Unemployment rates in 7 new Member States, 2006-I to 2011-II, total and 3 target groups



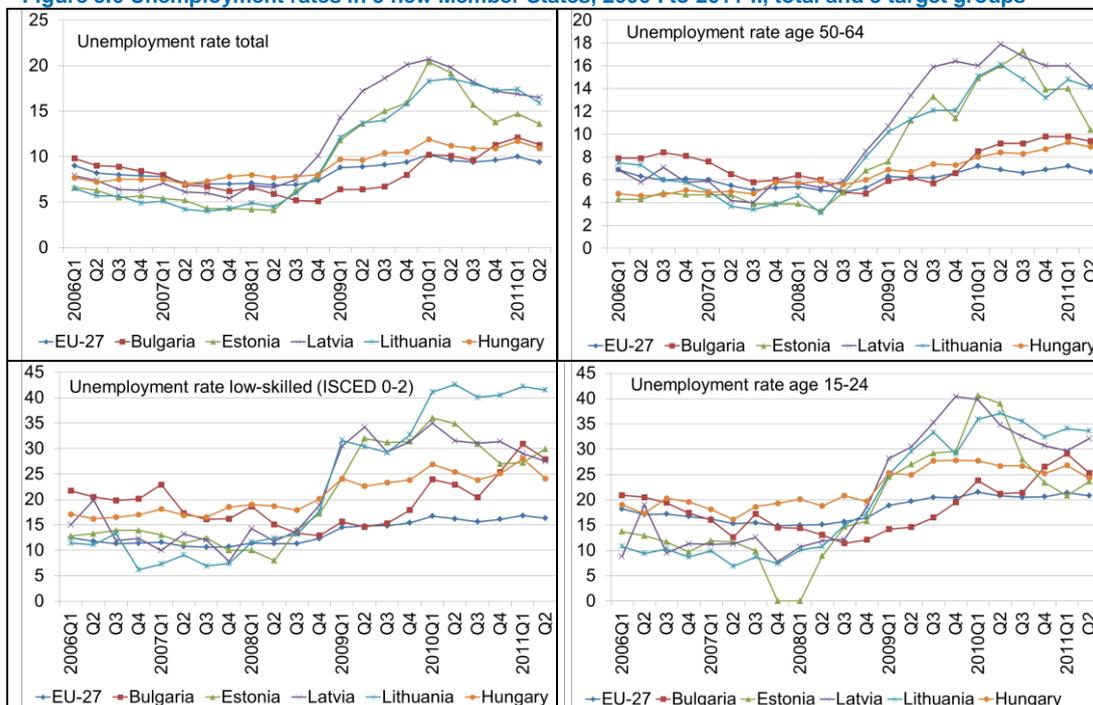
Group 2 noted a high unemployment rate since 2008 in all categories, with significantly high figures rising well over 20 per cent for youth and lower-skilled unemployment. It should be noted that this increase could be due to better registration and/or participation in the formal economy, but the

¹⁵² There was a break in the series of 2008 quarter 1 in Malta, data for older workers has been found to be unreliable with estimates from 2007 q2 until 2008 q3.

¹⁵³ Eurostat indicated that data for the unemployment rate of lower-skilled in Slovenia was unreliable in 2007 q3 & q4, 2008 q1, 3 and 4 and 2009 q1. In 2007 q2 and 3 and 2008 q2 data was also unreliable for youth. For the older workforce all data up until 2010 q2 was unreliable.

increase also seems indicative of a low degree of employment protection. Especially Estonia¹⁵⁴, Latvia and Lithuania¹⁵⁵ noted strikingly high figures of unemployment, with Lithuania exceeding 40 per cent unemployment amongst the lower skilled, one of the highest rates of unemployment across all categories of all Member States. Like in Slovakia and the Czech Republic, there is a particularly high risk of social exclusion of low-skilled workers in the Baltic countries. It appears, however, that most New Member States in this group have reached their peak and are slowly reducing unemployment across all groups.

Figure 5.6 Unemployment rates in 5 new Member States, 2006-I to 2011-II, total and 3 target groups



To sum up, despite the recent developments indicating a potential lowering of the unemployment figures in many Member States, unemployment rates are still higher in 2011 than in 2008. In addition to these figures, the OECD has also found that long-term unemployed has increased, particularly in countries where unemployment for longer than a year only composed a relatively small group of the labour force.¹⁵⁶ Mitigating policies and actions have varied across the Member States. The next section highlights the actions that have changed during the crisis.

At the EU level, youth unemployment has increased relatively the most of the three target groups. Youth unemployment seems particularly high in some countries with a segmented labour market with permanent and temporary employment in some countries such as Sweden and Finland (seasonal jobs, insider-outsider jobs) and Spain and Italy (major legal differences between temporary and permanent jobs). In some new Member States, social exclusion of low-skilled workers is a particular risk of the recent crisis.

¹⁵⁴ For all of 2006 and all of 2007 except for q4, data for the unemployment rate of lower-skilled and youth in Estonia was found unreliable by Eurostat. The rate for 2008 q3 and q4 for lower-skilled workers was also found to be unreliable. For 2007 q4 and 2008 q1, the rate for both groups has been estimated. For older workers, the data from 2006 up until 2008 q4 was unreliable with all rates for 2007 estimated.

¹⁵⁵ The unemployment rate in Lithuania is unreliable according to Eurostat from 2006 to 2008 for the lower-skilled, older workforce and youth, with the first reliable data for the lower-skilled found in 2009 q1, for youth in 2008 q3 and for the older workforce in 2008 q4.

¹⁵⁶ OECD Employment Outlook 2011, page 27.

5.3 Summary of the policies of 2009 and later

As has been explained in the previous chapters, governments can adjust active measures more easily than passive measures, although passive measures take up the larger chunk of the budget. Throughout the crisis, several countries invested heavily in unemployment income support through special packages or by letting automatic stabilizers do their work despite budget deficits, and many attempted to alleviate the impact on the labour market through a range of active measures.

New measures to prevent unemployment, notably short time work, and measures capable of reaching a wide audience, such as increased labour market services, were applied most frequently.

Based on both budget reports and policy statements, the following pages will clarify which changes have taken place and whether specific measures were abandoned throughout the crisis. The section following the description of changes in measures will then provide a preliminary analysis of these measures.

5.3.1 Out-of-work income support

As shown in Chapter 2, spending on out-of-work income support increased sharply in 2009. Expenditures on benefits due to loss of income increased in all EU-27 countries in 2009, although in Sweden expenditures on out-of-work income support was less than in 2007. In some countries, most notably some New Member States, Mediterranean and Anglo-Saxon countries, the expenditures on out-of-work income support doubled or tripled between 2007 and 2009¹⁵⁷. But compared to the population out of work and wanting to work, Chapter 2 showed that spending only increased slightly more than could have been expected in view of the increasing unemployment. Most of the increased expenditures on out-of-work income support therefore ensue from the increasing numbers of unemployed.

Countries have reacted differently to the crisis, extending or reducing benefits, or using benefits to preserve jobs (short-time work). An EEO (2011) publication¹⁵⁸ provides an overview of benefit systems and reforms in 2009 and later for all EU-27 countries and 6 other European countries.

Most countries that substantially extended eligibility of unemployment benefits in 2009 had two things in common:

- An ungenerous social system, not only for unemployment benefits but also when social assistance, family and housing allowances are included;
- Rapidly increasing expenditures in 2009.

In Italy, the law 2/2009 broadened the eligibility of workers for unemployment benefits for the 2009-2011 period, in particular to all typologies of workers including fixed-term employees, temporary agency workers, apprentices and self-employed who were company associates. Estonia also had a large number of new income support beneficiaries in 2009, but this is to be attributed to an additional inflow as a result of making dismissals easier in 2009 in a move towards the flexicurity concept. Bulgaria extended eligibility to various groups at risk in 2009. Latvia and Romania extended the maximum benefit durations in 2009. Latvia, Slovakia, Romania and Sweden all reduced contribution requirements in 2009. In Hungary, new programmes provided job seekers and

¹⁵⁷ From 2007 to 2009 doubled (in local currency): Spain, Greece, Italy, UK, Luxembourg, Czech Republic and Slovenia. Tripled or more: Bulgaria, Estonia, Ireland, Lithuania and Latvia. Calculations based on Eurostat LMP database.

¹⁵⁸ European Employment Observatory Review (2011), Adapting unemployment benefit systems to the economic cycle, ISSN 1831-9750.

entrepreneurs with benefits for those not eligible under the existing system provided they were seeking employment. In Greece, new (small measures) providing insolvency benefits, partial unemployment benefits, and benefits for the long-term unemployed near retirement were introduced. And in Slovenia, the new Labour Market Regulation Act of 2011 extended the range of compulsory insured workers.

Other countries extended eligibility only for particular groups at risk, typically later in the crisis period and temporarily: Belgium (2010 and 2011, young, old and long-term unemployed ALMP participants), Luxembourg (older workers), Spain (2011, ALMP participants and self-employed), Portugal (2009, long-term unemployed), Slovakia (2010, workers on parental leave), and Finland (2009, temporary layoffs).

On the other hand three countries, the Czech Republic, Ireland and France reduced maximum benefit durations in 2009 in response to the crisis. In France this response is built in the system since access to benefits and benefit durations depend negatively on the structural unemployment level, which is normally estimated higher in times of high unemployment. Thus in France expenditures on unemployment benefits increase less than proportional with the number of unemployed. The reduction of the maximum benefit durations in Denmark (2008) and Sweden (2010) were structural reforms that had already been planned before. Ireland also reduced the benefit levels in 2009, as did Lithuania. Ireland had a relatively generous system; however, the dire budget situation prompted severe cuts. In Lithuania, the reduction in benefit levels increased the dependence on social assistance. Poland is the only other country that reduced benefit levels, but the reduction in Poland in 2010 was planned before the crisis.

Table 5.1 summarizes the main reactions of countries to the 2008/2009/2010 crisis in the EU and the logical rationale behind the types of reforms, and the institutional setting in which the type of reform would be particularly relevant.

Table 5.1 Typology of adjustments of unemployment benefits to the business cycle*

Countries	Type of reforms	Logical rationale, institutional setting
BG, IT, LV, [EE], RO, SK, HU, GR, USA	Extended access early in the crisis	Protect from loss of income, ungenerous system
CZ, IE, FR, LT, [DK], [SE], [PL]	Reduced access or durations	Maintain budgets, generous system
BE, LU, ES, PT, SK, FI, [SI]	Temporary extension of access to target groups later in the crisis	Risk of social exclusion, segmented labour market
DE, NL, AT, UK, MT, CY, Japan	No reforms other than short-time work benefits	Letting automatic stabilizers work, high level of employment protection

Countries in brackets: reform was not a response to the crisis but had a similar effect.

The type of reforms is often related to institutional settings. Countries that extended access to unemployment benefits early in the crisis had ungenerous social systems in common. Also, some but not all countries that reduced access to unemployment benefits or benefit durations had relatively generous systems: Denmark, Sweden and Ireland, although only in Ireland the reduction was a direct response to budget deficits. One could speak of regression to the mean here.

Some of the countries that temporarily extended access to specific target groups faced a particularly high risk of social exclusion, namely Spain (segmented labour market), Slovakia (lowest share of low-educated workers in Europe) and possibly Finland (unionized/permanent jobs versus

non-unionized/temporary or seasonal jobs). Some of the countries with no reforms other than short-time work benefits had the highest levels of employment protection (Germany, Austria, Japan, the Netherlands through high severance pay for older workers).

In addition to the reforms on access and benefit durations, Portugal increased job search requirements and Bulgaria increased registration requirements. Hungary and Latvia introduced sanctions on benefit claimants working in the informal economy. These can be seen as accelerated modernizations of the benefit system in response to the crisis.

5.3.2 Short time work measures

Specific measures that many countries expanded or introduced in response to the post-2008 crisis were short-time work measures. Short-time work measures are partial unemployment benefits to cover the financial loss of income if employers reduce working hours. Short-time work is a measure to prevent full unemployment and to keep workers associated with their employer, in addition reducing the costs of hiring new workers if the economy should pick up.

The scheme was put in place for companies or entire sectors that could no longer afford to pay its employees to work their contracted working hours, but would be able to stay in business if the working hours were shortened. By compensating the loss of income, the measure may prevent full unemployment of the employees and thereby reduce the costs compared to a full benefit. In many countries, these short-time working measures have a specific duration and are combined with mandatory training for the employee receiving the benefits, to ensure their continued employability and adaptability to the labour market.

Based on Hijzen and Venn (2011)¹⁵⁹ we group countries that have implemented short-time work benefits by their use. Countries where short-time work benefits were used by a relatively high share of employees include countries with high levels of employment protection. In three countries, the short-time work benefit rather appears to be an unemployment benefit without termination of the employment contract: Spain, Portugal and Finland. Interestingly, these are countries with relatively segmented labour markets, where companies are only likely to use short-time work schemes for workers with permanent contracts since other workers can be easily dismissed.

Table 5.2 Typology of use of short-time work benefits*

Countries	% of employees	Avg. hours reduction
BE, IT, DE, LU, Japan	3-6%	10-40%
PL, DK, AT, NL, FR, SK, HU, IE, CZ, SI, BG, USA	0-2%	10-40%
ES, PT, FI	0-2%	80-100%
EE, LV, LT, SE, UK, GR, RO, CY, MT	--	--

Hijzen and Venn indicate that relative to the use of the short-time work scheme, the highest numbers of jobs are saved, with the smallest deadweight losses, in Germany, Japan and Austria, three countries with the highest degrees of employment protection. The short-time work schemes appear least effective in Spain, Portugal and France, countries with a large share of workers on temporary employment contracts.

¹⁵⁹ Hijzen, A. and D. Venn (2011), The Role of Short-Time work Schemes during the 2008-09 Recession, OECD Social, Employment and Migration Working Papers, no. 115, OECD Publishing.

Apart from the reduced number of hours, it is hard to determine key factors that determine the effectiveness of short-time work schemes. For example, when comparing Germany (effective scheme) with Spain and France (less effective scheme), Germany and Spain have a job search requirement and a no-dismissal condition in common, and Germany and France have a required agreement between social partners in common.

It is interesting, though, to note the countries that did not require eligibility of the employee for the unemployment benefit, i.e., Austria, Belgium, the Czech Republic, Denmark, France, Hungary, Italy, Poland, Slovakia and Spain, because quite a few of these countries have segmented labour markets, most notably the Czech Republic, Slovakia (low shares of low educated workers), Spain and France (high shares of temporary workers).

The hours reduction and the eligibility requirement illustrate the dilemma of countries with segmented labour markets on how to target the scheme. Should it be targeted at all workers risking ineffectiveness among temporary workers, or at permanent workers with the risk of increasing the labour market segmentation and the risk of social exclusion?

In most countries short-time work was extended or introduced as a temporary measure (OECD, 2010).¹⁶⁰ Germany extended eligibility from six to 24 months in 2009 and then reduced back to 18 months in 2010. This trend was also noted in Austria, Finland, France, Germany, Luxembourg and Portugal. In Belgium and the Netherlands, a new measure was introduced in 2009 which already ended in 2010.

5.3.3 *Early retirement*

The assessment of change in passive labour market policies during the economic crisis demonstrates the least amount of short-term changes in early retirement measures at the start of the post-2008 crisis. Rather, changes to early retirement schemes are an on-going process of structural reforms. As explained in Chapter 2, most countries have already reduced or discontinued early retirement schemes. Countries that still apply early retirement measures are eleven old and three new Member States: Austria, Belgium, Denmark, Germany, Spain, Italy, Finland, France, Portugal, Luxembourg, Ireland, Lithuania, Poland and Slovakia.

During the crisis no new early retirement measures were introduced and overall expenditures dropped, with the exception of rather small increases in expenditures to support older workers laid off during the crisis into early retirement, for example in Spain. Instead of using the early retirement measure as a short-term intervention, preventing early retirement has been approached as a long-term structural change objective in many EU countries, including the new Member States.

The principle of preventing rather than encouraging early retirement is a notable difference in approach as compared to the economic crisis in the 1980s, and again in 1991-1993. During those crises, older workers were often asked to retire early to make room for younger workers. The lesson learnt from the 1970s and 1980s economic crises was that early retirement policies undermined “labour supply and growth for a generation, without creating the job opportunities for younger workers that were envisioned” (OECD, 2010). The OECD also warned that although countries on the whole did not proactively encourage early retirement during the post-2008 crisis, “caution will be needed to ensure that early retirement does not rise de facto via some relaxation of

¹⁶⁰ Responding to the crisis while protecting long-term growth, going for growth Chapter 1 OECD 2010.

eligibility criteria to existing social transfer programmes (i.e., unemployment benefit or disability schemes)”.

Several EU countries have taken measures to reduce early retirement incentives, including Austria, Belgium, Finland, France, Greece, Luxembourg and Slovakia.¹⁶¹ The implementation of these measures may have been brought forward faster due to the economic crisis, but in most of these countries, these measures were identified before the crisis as necessary structural changes.

France, for example, had been in the process of developing plans for retirement reforms (beyond early retirement) when the crisis occurred. Planned measures included:¹⁶²

- The right to combine income from employment with a pension;
- A higher premium on retirement benefits when postponing retirement;
- Repeal of the automatic retirement of employees at the age of 65.

France already had plans to reform early retirement before the post-2008 crisis. The crisis expedited the dialogue in France and moved the programme’s deadline from 2012 to 2010.

France’s reaction to the crisis is by no means the exception but rather the rule, with a number of countries having been in discussion or already implementing changes to their pension system as explained in Chapter 4, including reducing early retirement. Most notably, the age limit for early retirement has or will be increased and in certain cases, there are plans to index lifetime with the purpose of continuously updating the retirement age, for example in Denmark as of 2025.¹⁶³

Also in Belgium, the employers are expected to play an important role in ensuring that older workers remain employed and they are targeted with incentives to continue to do so. The burden of early retirement has therefore shifted more to the employer¹⁶⁴. The employer contribution will increase for earlier retirement ages:

- 10 per cent for someone retiring at age 60 and older;
- 20 per cent for someone retiring at ages 58 and 59;
- 30 per cent for someone retiring at ages 55-57;
- 40 per cent for someone retiring at ages 53 and 54;
- 50 per cent for someone retiring at age 52 or younger.

In most countries, early retirement reforms target a change in behaviour of the employee. However, in certain countries new measures have been designed during the crisis to stimulate employers to play a key role in early retirement prevention. Hungary, for example, implemented a new rule whereby “businesses employing persons in jobs with potential health hazards have to pay a social contribution to cover eligibility for early retirement”.¹⁶⁵ This law came into effect in 2007 and is anticipated to lead to employers having to bear the full burden of early retirement of employees due to work-related health problems, rather than the state budget by 2012. The underlying idea is to incentivise employers to maintain older employees with work-related health problems.

¹⁶¹ Going for growth at a time of a financial crisis, OECD 2009.

¹⁶² 2008/2009 Stability and Convergence Programme France.

¹⁶³ 2008/2009 Stability and Convergence Programme Denmark.

¹⁶⁴ 2009/2010 Stability and Convergence Programme Belgium.

¹⁶⁵ 2008/2009 Stability and Convergence Programme Hungary.

5.3.4 Labour market services

Labour market services provide a wide range of assistance to the unemployed across the EU, predominantly through information provision and job search assistance. Prior to the post-2008 crisis, these services had been found to be one of the most cost-effective interventions, and as the number of unemployed increased, it should, according to Cazes (2009)¹⁶⁶, be no surprise that labour market services continued to be used by the EU Member States.

Short-term crisis measures consisted mostly of hiring more staff or intensifying job-matching services for specific target groups. The most vulnerable groups in the labour market, who were hit harder and were found to have higher rates of unemployment, were supported more intensively through the labour market services during the crisis. Cazes (2009) argues that focusing employment services on youth specifically is beneficial during a crisis as they are not only hit hard during an economic downturn, they are also the ones to most lack skills needed to find employment.

A large share of Member States indeed decided to expand their labour market services, including; Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Hungary, the Netherlands, Poland, Romania, Sweden, Spain and the UK. This was also noted by the OECD, as over two-thirds of their member countries used discretionary measures to increase employment services.¹⁶⁷ To support these existing services, several short-term measures were put in place including hiring more labour market service staff and making use of EU funding:¹⁶⁸

- Hiring of 1500 professional counsellors in the public employment services and providing additional services for vocational education guidance in Spain, but these measures combined accounted for only 7 per cent of employment service expenditures in 2009;
- Extra support for jobseekers out of work for more than six months and an activation guarantee for young people in the UK as well as a “New Deal” with measures for youth and the unemployed in Northern Ireland, worth 7.6 per cent of labour market service expenditures;
- Advice and support to the unemployed to set up their own company, guidance services for transition to work and advising youth who are not registered as unemployed in finding employment were some of the new measures implemented in France;
- In Sweden, additional assistance was provided to jobseekers in general through the Job and Development Programme from 2007 into 2009 whilst as of 2008 separate additional support was provided for young jobseekers through the Youth Job Programme; these measures combined accounted for 54 per cent of expenditures for employment services in 2009;
- A package of new measures worth approximately 10 per cent of employment service expenditures was developed in 2007 and 2008 and introduced in Germany in 2009 to stimulate further activation and reintegration;
- Supporting workers made redundant through the European Globalisation Adjustment Fund (EGF), for example textile workers in Belgium, Dell workers in Ireland and workers in the motor industry in Austria and Sweden.

Countries that did not increase labour market service expenditures between 2007 and 2009 include Romania, Latvia, Italy, Ireland, Greece (2009 expenditures equalled 2006 expenditures), Cyprus (although expenditures decreased between 2007-2009, overall they were higher than 2006) and France (see ‘creating efficiencies’ below).

¹⁶⁶ Labour Market Policies in Times of Crisis, Employment Sector Working Paper No 35, 2009, ILO 2009.

¹⁶⁷ Tackling the job crisis, the labour market and social policy response, OECD 2009.

¹⁶⁸ Based on Eurostat LMP database.

Several of the activities funded during the economic crisis were previously planned structural changes and will remain in force after the crisis. These structural changes can be categorized into three forms, of which the second and third are further discussed:

1. Increasing intake;
2. Creating efficiencies;
3. Improving effectiveness.

Creating efficiencies

The allocation of responsibility for the unemployed varies across the Member States, with some having a 'one-stop-shop' approach whereas others have separated the provision of unemployment benefits from labour market services. With a heavy burden on the budget, some countries took the crisis as an opportunity to stimulate further efficiencies by combining these services and reducing the information needed to track the unemployed.

Improving assistance to jobseekers while saving budget was the cornerstone of the French reform in labour market services during the crisis, based on policy papers and supported by increasing expenditures according to the Eurostat LMP database. In 2008 the plan to merge the labour market services with the unemployment insurance network became an official Act. It is anticipated that this merger will save 2.5 per cent annually between 2010 and 2012. Based on evaluations of similar reforms in the Netherlands (2001) and the UK (Job-Centre Plus in 2008) small but uncertain savings may indeed be expected from such a reform, especially by transferring staff more easily from activation measures to the administration of benefits during a time of high unemployment. Without this kind of staff relocation, however, efficiency gains are more doubtful.

Improving effectiveness

The role of labour market services in facilitating the job search process and thereby reducing the time on benefits relies heavily on labour market information. Several countries have taken measures to improve the effectiveness of their matching role by facilitating collaborations between education and employment providers with the aim of reducing the mismatch between supply and demand on the labour market.

In Cyprus, for example, further modernization of the services was continued in 2009, accounting for 6.7 per cent of the financing for employment services, whilst in Latvia, the role of labour market services was expanded to include mapping the needs on the labour market and encouraging education institutes to ensure qualifications were relevant to these needs. Similarly, in France, new reform measures were proposed "to develop a fairer and more effective training system and to turn the individual participant into a player with genuine input in his or her professional career". Indeed, the development of "Pôle Emploi", which merges unemployment benefit services with activation, took up 63 per cent of all employment service expenditures in 2009 according to the Eurostat LMP database. The French government is currently investigating possibilities to individualize employment services, meaning that jobseekers have a greater influence on the choice of employment service (providers).

These changes are not temporary crisis measures; however, they have been considered as imperative in times of crisis when especially short-term courses can be designed to re-train redundant workers to obtain skills that are most needed in the remaining vacancies on the labour market.

5.3.5 Training

Most countries increased spending on training in 2009, but Poland (still +0.2 per cent of GDP based on downward revised figures of March 2012) and Portugal (+0.2 per cent of GDP) expanded expenditures hugely. In fact, only a few countries did not spend more on training, or did initially but then reallocated budget to other measures. Countries that did not increase their expenditures between 2007 and 2009 on training included Denmark, Sweden, the Czech Republic, Greece, Luxembourg, Malta, Romania and the UK. Countries that initially increased expenditures but then decreased them to below 2006 levels in 2009 are Bulgaria, Hungary, Italy and Slovakia, according to the Eurostat LMP database.

The majority of countries did not introduce new training measures, but instead expanded existing programmes. Countries that did introduce new training measures include Latvia, Luxembourg, Ireland, Greece, France, Estonia, Denmark, Cyprus, Bulgaria and Belgium. When new crisis measures were introduced, they did not make up a substantial part of the training budget. For example, Ireland, introduced in 2008 and 2009 a new apprenticeship scheme for people made redundant, a short-time work pilot training scheme, an online learning measure and an evening course programme, but according to the Eurostat LMP database all of these measures together amounted to less than 1.7 per cent of the training expenditures in Ireland in 2009.

Regulatory changes regarding training since 2008 include:

1. Shortening of the waiting period for training (Finland & the UK);
2. Subsidizing more training opportunities (Bulgaria, Cyprus, Spain, Ireland, Poland, Sweden);
3. Providing training for sectors that are likely to expand after the crisis, such as health and social care (Austria, Belgium, UK);
4. Widening the scope of training to include vulnerable groups including:
 - a Those at risk of being laid off;
 - b The self-employed;
 - c Youth;
 - d Older workers;
 - e People with a disability¹⁶⁹.

For purposes of discussing training programmes in the subsections below, we distinguish three different kinds:

1. Training the unemployed for skills needed in the labour market;
2. Training the employed to keep them employable and in the labour market;
3. Training youth, to become familiar with the labour market and have an entry point to join it.

Training the (about-to-be) unemployed

In the context of preventing long-term unemployment, training workers (at risk of) becoming redundant has been a widely used intervention during the post-2008 crisis. In particular, (short) compulsory training has enabled re-skilling or up-skilling training courses to allow for a faster transition into a new sector. Such training programmes have demonstrated success in filling new vacancies;¹⁷⁰ whilst ensuring that those who do become unemployed continue to have social contacts, which is a key element in preventing long-term unemployment, according to Eurofound (2010).¹⁷¹

¹⁶⁹ In Belgium, for example, 0.3 per cent of the budget for training measures in 2009 was used for new integration tracks of people with disabilities according to the Eurostat LMP database.

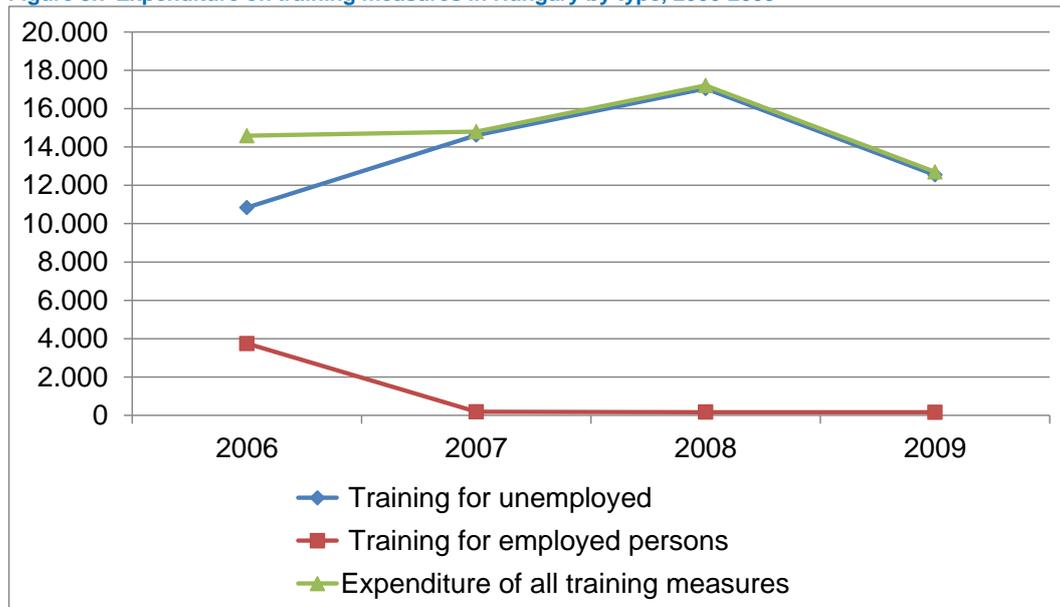
¹⁷⁰ Responding to the crisis while protecting long-term growth, going for growth Chapter 1 OECD 2010.

¹⁷¹ Financing and operating active labour market programmes during the crisis, background paper 2010, Eurofound.

In several countries, budget was made available for training employees in either specific professions or full sectors that were on the verge of or in the middle of the crisis. In Spain, for example, 201 million Euros was made available during 2008-2009 for “professional training and labour insertion particularly for unemployed workers from the construction industry”.¹⁷² Lithuania and Poland extended eligibility to workers about to become unemployed, according to Eurofound (2010).

In other countries, no new measures were implemented but existing ones were expanded to reach the increasing number of unemployed persons. Hungary, for example, virtually ceased training for the employed in 2007 and instead focused on the unemployed, as Figure 5.7 illustrates.

Figure 5.7 Expenditure on training measures in Hungary by type, 2006-2009



Source: Eurostat LMP database.

Training the employed

Before the economic crisis several actions had been undertaken to promote the training of the employed, most notably through lifelong learning campaigns, including the design of strategies and the exchange of best practices. At the same time, lifelong learning of the employed has been considered to be the responsibility of the employee and the employer in many Member States. During the economic crisis, however, on-the-job training was subsidized in several countries, especially in combination with forced reduced working hours (also see the section on short-time work schemes).

In a short-time work scheme, employees could maintain their income level from before the forced reduced working hours, whilst employers were able to continue to afford more employees. Furthermore, the training courses allowed for further opportunities to increase employee productivity. As Cazes (2009)¹⁷³ highlights, subsidizing training during a crisis does not reduce labour costs of employers in itself, but it does reduce labour costs if organized through a short-time work scheme.

¹⁷² 2009/2010 Stability and Convergence programme Spain.

¹⁷³ Labour Market Policies in Times of Crisis, Employment Sector Working Paper No 35, 2009, ILO 2009.

As a result of the measures taken during the crisis, Germany has become a lighting example for successfully employing schemes that allowed this reduction in time without losing income through subsidized training programmes. One feature of short-time work in Germany was that employers would be exempt from social security contributions as of the seventh month from implementing a reduced working time scheme; and if the employer provided training, the social security contributions were allowed to be waived sooner. By doing so, the German measure placed responsibility for training with the employer rather than with the State or employee. The increase in total expenditures on training in Germany in 2009 was largely due to stronger expenditures on vocational training of unemployed, “to facilitate the integration of the unemployed, to prevent potential unemployment [of school leavers] and to provide recognised vocational qualifications through training” according to the Eurostat LMP database.

Modifications to the rules to ensure that the employed were able to participate in training also took place in Poland and Bulgaria, albeit with various restrictions of the groups that were at risk of losing employment. In Sweden, similar actions took place, such as between the unions and employers in the manufacturing sector which resulted in reduced working hours of 20 per cent, to be replaced with participation in training (Cazes, 2009).

While short-time work schemes were an important vehicle for training employed workers during the post-2008 crisis, other schemes for training employed workers were introduced in 2008 and later as well. But contrary to short-time work schemes, the other new schemes seem to be structural rather than temporary measures. In Belgium, for example, a new skills fund was assigned 14 million Euros in 2010 and then 26 million Euros in 2011 for skills development of current and future workers¹⁷⁴. Also, in Germany, a package of measures was introduced, especially for vulnerable groups (33 per cent of all training expenditures in 2009). The largest of these measures were training of workers with disabilities and training of people with disabilities outside of the workplace¹⁷⁵.

Providing additional training for the employed may have had one additional effect during the economic crisis. People earliest affected by an economic downturn are those on temporary contracts and who are also the least likely to have received on-the-job training.¹⁷⁶ Especially young workers tend to have temporary contracts. The training they may have had thanks to the subsidy might help them in the end to find a new job when the economy picks up again. There are no detailed evaluations in this respect, but there is a rationale for targeting training of employed at young workers on temporary contracts, since employers have little incentive to provide this training. Spain's experience, however, casts some doubt on the effectiveness of training of workers on temporary contracts, since youth unemployment is notoriously high in Spain despite increasing expenditures on training. Indeed, there is a risk that employers keep replacing untrained workers with temporary contracts with trained workers until the State has in effect subsidized the training of all unemployed workers and workers on temporary contracts.

Apprenticeship programmes

Youth unemployment rose drastically across the EU, and it may not come as a surprise that trainee posts continued to be subsidized. At the same time, employers may be more reluctant to make trainee posts available in a time of crisis. Several countries have introduced new measures which address this problem.

¹⁷⁴ 2011 Stability and Convergence programme Belgium.

¹⁷⁵ Based on combined Eurostat and OECD statistics database created for Chapter 2.

¹⁷⁶ World Economic Outlook Chapter 3 and 4, March 2010, IMF.

In France, several new measures, including training contracts, allowances for training for transition to work and key competency training, were developed and implemented through the Pôle emploi in 2009. But the largest share (30 per cent) was spent on increasing incentives for employers to create trainee posts for youth according to the Eurostat LMP database. France was not alone in increasing apprenticeship programmes. Poland, for example, devoted nearly 60 per cent of training expenditures on the apprenticeship measure in 2007 and increased expenditures in 2008 by 30 per cent on apprenticeship programs and all other forms of training, roughly one third of which is funded through ESF. In 2009 Poland merged vocational training for young people with apprenticeships into a new workplace measure with a further increase on aggregate expenditures.

In the case of France, increasing support to trainee programmes was not necessarily a crisis measure but rather part of a structural reform plan. The same applies to Cyprus, for example, which designed and implemented strategies to reform vocational training into secondary schools (and to develop life-long learning).¹⁷⁷ The new European Social Fund programme in 2007 was also instrumental in bringing about new training programmes, especially in new Member States. In Estonia, for example, new learning workplaces and coaching for getting used to a work rhythm were funded.

The fact that the subsidies for trainee posts are intended as structural reforms implies that they will continue in times of low unemployment, and thus subsidize training by employers.

5.3.6 *Employment incentives*

In times of crisis employers may be more reluctant to recruit new workers. A rationale for providing incentives to employers could be the prevention of long-term unemployment. Few countries substantially increased expenditures for employment incentives and these were Poland (+0.1 per cent of GDP in 2009), Belgium, Denmark and Greece (+0.06-0.07 per cent of GDP in 2009), and Germany, Luxembourg and Slovenia (+0.03-0.04 per cent of GDP in 2009). The expenditures in these countries rose mainly due to the expansion of existing schemes, but the increases were small compared to increases that have been observed for other active measures in 2009. Newly implemented employment incentive measures had a small share in the overall budget for incentives, as is the case in France, Hungary, Luxembourg, Latvia, Malta, Portugal, Slovakia and the UK.

As the main expenditure category of employment incentives, we will first discuss incentives to employers followed by employment incentives to employees.

Incentives to employers

Where new employment incentives were introduced or where existing schemes were expanded, they targeted employers to create new or temporary employment for vulnerable groups. Youth, the elderly and people with disabilities were supported through employment incentives to employers, which mostly consisted of reduced employer contributions. In the UK, for example, the largest share of employment incentives was for vulnerable groups, such as people with disabilities and a new measure introduced in 2009 (costing 10 per cent of the employment incentives) was aimed specifically at vulnerable groups in Northern Ireland. Poland, Denmark and Greece expanded expenditures rapidly in response to the crisis, in the form of wage subsidies to provide unemployed workers with work experience. In Belgium, the main measure was a voucher to employ persons for

¹⁷⁷ 2011 Stability and Convergence programme Cyprus.

household services and aimed to combat informal work. Use of this voucher became increasing popular since its introduction in 2004, but this measure was not a crisis measure.

Similar trends were seen amongst other countries where budget increased, such as in Denmark, which created a new measure to support the elderly; in France, where budget nearly doubled to incentivize employers to hire people with disabilities; and in Belgium, for youth, the elderly or long-term unemployed. Employers in Belgium who created a position for youth, elderly or long-term unemployed could deduct an employment subsidy from the net salary to be paid (this was substituted by part of the unemployment benefit). The rule specifically applied to youth up to 26 years of age, to older unemployed as of 50 years old and the long-term unemployed as those who had been unemployed between one to two years. The reduction amounted to a maximum of 1,100 Euros over a whole period up to 24 months.¹⁷⁸

Especially in countries where the social security contribution rates have been lowered, employment incentives were not provided to recruit new workers, but to keep employees. Such measures have a serious risk of becoming 'deadweight loss', as Cazes (2009) pointed out. What makes incentives for retaining workers so costly, is that they are generic in nature, and apply to workers who would have been dismissed and workers who would have been retained alike, which is precisely the risk of deadweight loss.

Incentives to jobseekers

Although budget has been allocated to employment incentives, radical change to ensure better incentives for jobseekers have been markedly absent during this economic crisis. This is in fact no more than logical, since in times of crisis employers are more likely to be more reluctant to recruit workers, than unemployed workers are to accept a job. Nevertheless, there have been some minor reforms of incentives to jobseekers.

Short-term measures

The short-term measures introduced were most significant in Slovakia, where two new incentives were created to ensure the unemployed would search on their own and beyond their usual scope:

1. Jobseekers who had been unemployed for at least three months and found employment on their own, but received less than 304 Euros per month (gross), were granted a monthly stipend of 153 Euros in the first year and 77 Euros in the second year;
2. Jobseekers who found employment outside their place of residence were granted travel compensation for the first 12 months from the State. The further the distance, the higher the allowance, with a maximum of 110 Euros for 120 kilometres.

For Slovakia, the first measure must be seen in view of a package in which benefits are reduced if the beneficiary is caught working in the hidden economy. This costs a lot to enforce and employment incentives may provide an incentive to take up a regular job. A further argument offered in the reform programme was that the incentive may also induce unemployed workers without a benefit to make use of employment services. This latter argument seems less valid, since in times of high unemployment it makes sense to focus on beneficiaries.

There was virtually no spending on travel compensation in Slovakia in 2009, which suggests that this measure was little used. There might be high unemployment in some regions, but no matter how understandable the measure is, commuting time is more costly than commuting costs. Even if

¹⁷⁸ 2011 National Reform Programme Belgium, page 44.

commuting time were valued at half the wage cost, travelling a distance of 120 kilometres every day might cost the equivalent of 110 Euros per week rather than per year.

In Luxembourg, a re-employment bonus was expanded to include those who accepted a lower paying job than their previous position¹⁷⁹. In contrast, although the Flemish region in Belgium has had an incentive for employees to remain in employment (a 'jobkorting' or a tax discount for being in employment), it was revoked for savings purposes in 2010¹⁸⁰. Several additional employment incentives were used instead as crisis measures, including a 'restructuring reduction card' which allowed for lower personal contributions when employment was found for those made redundant before 30 June 2010.

Structural measures

Member States who were not as severely affected by reduced employment opportunities encouraged those who were not seeking employment or already in employment to increase working hours. In Germany, for example, the Act to Accelerate Economic Growth (2010) increased child benefits and tax-free child allowances to increase the employment rate while maintaining a work-life balance. Additional measures to support childcare of children under the age of three are currently being discussed¹⁸¹. Other smaller countries have demonstrated similar trends. Malta, for example, introduced tax benefits to encourage women, particularly working mothers, to become employed. Luxembourg made 20-25 million Euros available in 2009 for service cheques for childcare to encourage those who stayed at home to seek employment.

5.3.7 Supported employment and rehabilitation

Nearly all EU countries that maintained supported employment and rehabilitation measures before the crisis significantly increased their expenditures on these measures during the crisis. Only the UK and Latvia decreased expenditures on supported employment during the crisis. Despite the increased budgets, rather few new measures were enacted to support people with disabilities and other needs back into the labour market or to remain in the labour market during the crisis. Romania, Malta, Italy and Hungary were the only Member States not have such measures at the start of the crisis nor did they create them during the crisis, according to the Eurostat LMP database.

Countries that increased their supported employment programmes include New Member States such as the Czech Republic, Lithuania and Poland. The Czech Republic already provided funding to employers who employed more than 50 per cent of employees with a disability before the crisis but during the crisis, expenditures doubled from 2006 to 2007 and had tripled by 2009. The partial compensation of increased costs related to the employment of disabled persons provided through this measure comprised 88 per cent of supported employment measures in 2009 and nearly a third of all active employment measures in the Czech Republic. Equally, in Lithuania, funding of vocational training rehabilitation programmes tripled between 2006 and 2009. These programmes were designed to increase the employability of people with disabilities and provide reintegration opportunities into the labour market. Unlike the measures in the Czech Republic, however, the Lithuanian measures did not exceed 3 per cent of all active labour market expenditures (Eurostat LMP database).

¹⁷⁹ Based on the Eurostat LMP database.

¹⁸⁰ 2011 Stability and Convergence programme Belgium.

¹⁸¹ 2011 Stability and Convergence programme Germany.

In Poland, quite a number of new measures were introduced in 2008 including through job opportunities in the public service, a subsidy through a rebate on social security taxes for people with a disability who run their own business, for employers who hire people with disabilities and a similar rebate for people with disabilities working on a farm. Although these are substantial packages, they only totalled 10 per cent of supported employment funding in 2009. Instead, the largest increase was in expenditures of previously existing measures to subsidize wages (Eurostat LMP database).

Supported employment also increased in Continental and Nordic States, as it did in Sweden, where new supported rehabilitation programmes were developed under the Job and Development Programme and the Youth Job Programme and in the Netherlands where it is the highest funded active labour market measure (Eurostat LMP database).

Although some of these new and extended measures were crisis measures, many were also the result of structural change or of the European Social Fund programme (which restarted in 2007) rather than a crisis measure.

In Germany, for example, the main programme for supported employment ceased in 2005 with only a small number of measures remaining in 2006 and 2007. Then, in 2008, a new programme was introduced which provides temporary sheltered employment for people with disabilities through an intake process and workshop that determine the most appropriate vocational training for the disabled. The budget for this new programme is approximately one-third of the pre-2005 programme. Similarly, in Belgium, sheltered workshops were offered in 2008 for adapted employment for individuals who due to their disabilities are not (yet) able to cope with the requirements and constraints on the free labour market. Unlike the German intervention, however, the new measures in Belgium constitute less than 0,5 per cent of the supported employment measures, whilst in France, the system changed slightly later than in Germany, namely at the start of the crisis in 2007. Since then expenditures have been diverted from income guarantees to supported contracts and supported access to the regular labour market.

So new measures have been developed and continue to be developed to restructure support to those receiving benefits due to health-related work incapacity. These new forms of restructuring, especially underway in Sweden and the Netherlands, seek to reduce benefits through a reassessment of their ability.¹⁸²

5.3.8 *Direct job creation*

Although in some countries public work programmes for funding direct job creation were implemented during the crisis, this measure was not used extensively in most countries, according to the Eurostat LMP database. Only Hungary, Ireland, Latvia and Spain designed specific crisis programmes and Austria, Belgium and the UK increased expenditures of existing direct job creation programmes.

In Spain and Hungary, job creation was used intensively. In Spain, 3 billion Euros was made available through city government funding and a further 490 million Euros for research and development.¹⁸³ In Hungary, funding went up by more than five times the budget of 2006 resulting in an expenditure of 60 billion HUF on public work programmes in 2009, which made it the only

¹⁸² Financing and operating active labour market programmes during the crisis, background paper 2010, Eurofound.

¹⁸³ 2010 Stability and Convergence Programme Spain.

country to spend most of its budget (52 per cent) for active measures on direct job creation, according to the Eurostat LMP database.

All other countries reduced their expenditures to a level that made direct job creation one of the lowest funded active measures during the crisis. In the Netherlands and Cyprus, job creation was defunded entirely, whilst in the Czech Republic and Germany one half and one quarter respectively of pre-crisis funding was cut, according to the Eurostat LMP database.

5.3.9 Start-up incentives

The most commonly used start-up incentive since the crisis was not only through the set-up of incentives through funds but rather the reduction of start-up costs through administrative simplification. Administrative simplification for self-employment or setting up an SME were undertaken by a large group of countries and have been confirmed to be the most efficient support to start-up companies, as the impact extends beyond the crisis.¹⁸⁴ Examples of these changes include:

1. Portugal set up a 'Simplex Programme' to increase simplicity, transparency and online access to government tools;¹⁸⁵
2. In addition to the "the "Kleiner Mittelstand" initiative, aimed at improving financing options for SMEs, Germany designed the SME Relief Act, which included changes to the existing Limited Companies Act to make it easier to set up a limited company;¹⁸⁶
3. Poland recognized the need to reduce administrative burdens and in fact, highlighted the reduction of barriers for entrepreneurship as one of their priorities in the 2009-2011 strategy for stimulating the labour market;¹⁸⁷
4. Measures were also increased in Ireland (from 56 million Euros in 2006 to 76 million Euros by 2009) to provide allowances for stimulating self-employment.

New funds were created to stimulate the start-up of SMEs in nearly all Mediterranean countries and the New Member States. In Romania, for example, a new SME Credit Guarantee Fund and an SME Credit Counter-Guarantee Scheme were established.¹⁸⁸ The Nordic countries have made much less use of start-up incentives.

5.4 Preliminary assessment of the measures

5.4.1 Out of work income support

Protection against loss of income

Some of the countries, particularly those with relatively ungenerous social systems, extended eligibility to unemployment benefits in reaction to the crisis. This extension raises questions on the free rider problem discussed in Chapter 1, i.e., groups that are protected against loss of income without previous contribution payments. Employers have an incentive to hire workers under contracts for which no social security contributions apply, since only employees receive something in return for their contributions, namely, insurance against loss of income. In the past, fixed-term and part-time workers were not always covered by social insurance, and in the future employers might recruit more workers from abroad or work with multiple small employment contracts to avoid

¹⁸⁴ Going for Growth, Chapter 3 OECD 2009.

¹⁸⁵ 2008/2009 Stability and Convergence Programme Portugal.

¹⁸⁶ 2008/2009 Stability and Convergence Programme Germany.

¹⁸⁷ 2008/2009 Stability and Convergence Programme Poland.

¹⁸⁸ 2008/2009 Stability and Convergence Programme Romania.

paying contributions. Although countries did raise contributions and extend the range of workers for whom contributions are required along with extending eligibility, a more rigorous approach could be adopted. Regulation that defines the employment contracts for which contributions are compulsory is open to abuse through new forms of employment relations not defined by law. Solutions could be to require companies to work with only one or two types of employment contracts, or to define an employment relationship regardless of the specific form of employment contract, i.e., an “apparent employment relationship” if a person works under the authority of a company, or “assimilated workers”. This apparent employment relationship includes self-employed who are hired to perform work specified by the client.

Poverty and equity

Combating poverty and maintaining equity were the specific reasons for Latvia to extend eligibility in 2009. On the other hand, Lithuania reduced benefit levels in 2009 to maintain budgets. However, if out-of-work income support fails to protect against poverty, social assistance schemes will take over. In Lithuania expenditures shifted to social assistance and the net impact on expenditures on income support was the same as in Latvia, as can be seen in Table 5.3.

Table 5.3 Increase of expenditures on income support as a percentage of GDP in 2009, Latvia and Lithuania, compared to 2008, in percentage points

Country	Out-of-work income support	Social exclusion	Sum
Latvia	+0.7	+0.0	+0.7
Lithuania	+0.5	+0.2	+0.7

Source: Eurostat LMP and ESSPROS database.

In Lithuania and Latvia, unemployment and social assistance benefit levels are both low enough to incentivize job search. Since most countries that extended unemployment benefits in 2009 have ungenerous social systems, extended unemployment benefits seem to have a limited impact on job search. However, in Hungary which has a more generous system, an extension of the unemployment benefit could have the effect that an activation plan is required for more beneficiaries than would be the case if social assistance took over.

Affordability of the flexicurity system

The low government debts and deficits in Scandinavian countries indicate that a combination of generous benefits, activating elements including requirements to search and accept jobs or to participate in labour market programmes, and a relative ease to dismiss workers could be affordable. As Andersen (2011) has pointed out and as has been argued in Chapter 3, sufficiently high contribution rates are a requirement to let “automatic stabilizers” do their work in the flexicurity system. The reductions of the maximum benefit durations from four to two years in Denmark (2008) and Sweden (2010)¹⁸⁹ can be interpreted as practical means to reduce expenditures and incentivize job search, which Andersen (2011) argues is necessary in a system of automatic stabilizers to minimize long-term unemployment. OECD (2010) also argued that reducing long maximum benefit durations is necessary since long benefit durations keep the unemployed from returning to work without delay.¹⁹⁰

In countries where labour market measures are primarily funded through general taxes, low government debt and deficit would be logical requirements for affordability. One such country that made a move towards the flexicurity concept in 2009 is Estonia. The new Employment Contracts

¹⁸⁹ Financing and operating active labour market programmes during the crisis, background paper 2010, Eurofound.

¹⁹⁰ Responding to the crisis while protecting long-term growth, going for growth Chapter 1 OECD 2010.

Act of Estonia in 2009 made dismissals easier. In 2009, expenditures on out-of-work income support rose from 0.2 per cent of GDP in 2008 to 1.3 per cent of GDP in 2009. Yet from a budget point of view this increase was affordable, because in 2010 Estonia had a government debt of less than 10 per cent of GDP and a budget surplus of 0.1 per cent of GDP. The unemployment rate rose sharply from 4.2 per cent in 2008Q2 to 20.4 per cent in 2010Q1, but this is comparable to Latvia (from 6.6 to 20.7 per cent) and Lithuania (from 4.5 to 18.3 per cent) in the same period. Part of the reason for this astonishing budget achievement is likely that, of all countries in the EU, other social benefits such as social assistance, housing and family allowances are most ungenerous in Estonia.

The importance of considering other social benefits besides unemployment benefits when assessing the affordability of policies becomes more apparent when considering the UK, where unemployment assistance is quite ungenerous but disability benefits, housing and family allowances are quite generous. The UK had a budget deficit of more than 10 per cent in 2009 and 2010, and a government debt of 80 per cent of GDP. But other social benefits besides unemployment benefits contributed more to budget deficits in 2009 in other countries as well, according to the ESSPROS database.

Coquet (2011) concludes that benefits should be moderately generous and paid indefinitely to smooth consumer demand. What makes the flexicurity system affordable, and social security in general, according to Coquet (2011), are “unemployment insurance rules”. Cornerstones of such rules are requirements to search and accept jobs. The Nordic countries, as well as Germany, for example, have rigorously reformed their benefit systems since the early 1990s to include such requirements. In sum, a flexicurity system seems affordable if adequate requirements are stipulated to search and accept jobs.

Sanctions

Sanctions on benefit claimants who work in informal jobs place a heavy burden on enforcement. This burden is especially heavy during an economic crisis, when the majority is truly in need of support. Economic literature indicates that enforcement of benefits is most effective in times of low unemployment, when there are more job opportunities and it may be easier to catch beneficiaries with an informal job on the side.

5.4.2 Short-time work measure

Since short-time work is a measure that was first implemented on a large scale in 2009 and 2010, this measure has not been rigorously evaluated to assess treatment effects at the individual level. A comparison between countries shows that short-time work is most effective in countries where employers have no easy option to dismiss workers. Short-time work is offered as an alternative to dismissing workers. In countries with a large share of fixed-term workers who can be easily dismissed, short-time work is less effective. Indeed, Hijzen and Venn (2011) concluded that “the positive impact of STW (from 2008 to 2009) was limited to workers with permanent contracts, further increasing labour market segmentation between workers in regular jobs and workers in temporary and part-time jobs.”¹⁹¹ Hijzen and Venn (2011) also concluded that compared to the use of short-time work, most jobs were saved, with the smallest deadweight losses, in countries with a high degree of employment protection: Japan, Germany and Austria.

Eichorst found that these differences can be attributed to the types of workers targeted by the programme and that in Spain this involved a large number of temporary workers. “The relative

¹⁹¹ Hijzen, A. and D. Venn (2010), The role of short-time work schemes during the 2008 2009 recession, OECD.

success of Germany is partly explained by the fact that the core labour market of skilled workers in manufacturing is covered by strong legal dismissal protection – hence, short-term adjustment does not lead to quick layoffs but is dominated by an elaborate arrangement of internal flexibility.¹⁹² Indeed, 90 per cent of temporary workers lost employment during the crisis in Spain whilst those on a permanent contract did not experience such high numbers of unemployment. So short-time work was ineffective in preventing the high unemployment rates in Spain. Whether short-time work really helped in reducing unemployment rates in Germany has not yet been rigorously evaluated, but there certainly was an argument that Germany “mainly experienced an external shock resulting from the open nature of its economy”¹⁹³. If the shock is temporary, and prospects for the future are bright, arguments for short-time work are strongest. Moreover, Germany made short-time work a temporary measure and restricted the use to certain sectors. Indeed, while short-time work expenditures rose rapidly in 2009, it was still below 10 per cent of total expenditures on out-of-work income support in 2009.

To conclude with an argument offered by Cazes (2009)¹⁹⁴, short-time work in combination with the training of the employed may have been a successful measure employed during the crisis, but it cannot be applied indiscriminately. It comes with the constraint that it works better when employees are provided with training and when a realistic timeframe is applied to prevent permanency of the measure. Cazes argues that it is necessary to ensure that clear rules and protocols apply to the measure to prevent unnecessary continuation of the programme. Finally, Cazes argues that short-time work may not be the best option for governments in weak financial standing as they are costly measures. Whilst we realize that this is true, we argue on the contrary that the effectiveness in reducing (more costly) full-time unemployment should be the leading principle, and thus that short-time work should only be considered in countries with strong employment protection.

OECD (2010) also notes risks of short-time work measures in the mid to longer term.¹⁹⁵ OECD (2010) notes that one of these risks is that employees permanently reduce working hours and thereby reduce the available labour ‘input’ in the economy. It may work in the short term and during a crisis, but to avoid reducing economic productivity in the long run, the OECD argues that a clear framework is needed for terminating the use of these measures.

5.4.3 *Early retirement*

EU Member States appear to have learned from the crisis in the 1980s and early 1990s, and early retirement has not been expanded in response to the economic crisis. Moreover, in certain cases the crisis has been a catalyst to implement reform measures earlier than planned. Early retirement is, as we have seen, an extremely costly measure and does not reduce youth unemployment.

The reforms that are planned throughout Europe are part of an on-going process. Across the EU, expenditures on early retirement have already been reduced from 0.3 per cent of GDP in 1993 to 0.08 per cent of GDP in 2009 as Figure 2.11 in Chapter 2 has shown. In budgetary terms, the real challenge of an ageing society is the old age pensions, on which 11 per cent of GDP was spent in 2009 according to the ESSPROS database, see also Chapter 3.

¹⁹² The impact of the crisis on employment and the role of labour market institutions, IZA November 2010, Discussion paper 5320.

¹⁹³ World Economic Outlook Chapter 3 and 4, March 2010, IMF.

¹⁹⁴ Labour Market Policies in Times of Crisis, Employment Sector Working Paper No 35, 2009, ILO 2009.

¹⁹⁵ Responding to the crisis while protecting long-term growth, going for growth Chapter 1 OECD 2010.

5.4.4 Labour market services

In addition to intensifying job-matching services at the start of the crisis, it has been argued that structural changes should be made in labour market services to ensure their optimal functioning during regular times and especially towards the end of a crisis. The implications of structural changes taken on labour market services have not yet been measured, but “are unlikely to deliver any immediate results” and are more likely to be more effective when the economy has picked up (Cazes, 2009). Improving effectiveness and efficiency of labour market services is a matter of on-going concern and should be viewed as such rather than as crisis interventions.

In Chapter 1 it was argued that job search assistance should be continued in times of crisis even if it is not very effective, because it costs little. People still find jobs and the others, especially those belonging to vulnerable groups, will be continuing to search for jobs when the economy picks up again. Much of the literature on job search assistance during the crisis starting in 2008 draws similar conclusions. According to the OECD (2010) report, the employment services are an important tool to prevent long-term unemployment by assisting in the search for employment. Like Cazes (2009) this OECD report argues that particularly youth unemployed workers would benefit from job searching assistance and adds that also the older unemployment workforce should be supported through job matching activities. A Eurofound (2010) report concerning the active labour market policies further highlights the positive effects of job search support for vulnerable groups during the crisis.¹⁹⁶ A European Commission background paper (2010) on active labour market policies confirms the potential of job-search assistance as a cost-effective labour market measure, but also warns to avoid a ‘one-size-fits-all’ approach and instead suggests to tailor the activation to the target group, whether it be youth, elderly, low-skilled/unqualified, or people with disabilities.¹⁹⁷

Structural reforms are taking place notably in France, where the delivery of active and passive benefits is being integrated, as they are in the UK and Nordic countries too. Costs could be reduced by a few per cent by preventing double paperwork and by a more strict selection at the gate by employment services, but comes at the risk of neglecting non-beneficiaries and beneficiaries with short maximum benefit durations, and the risk of short-term focus in general. Evidence of the effectiveness of private versus public employment services as well as individualized employment services is mixed. Therefore, structural reforms of internal organizations do not seem to be a top priority. Coquet (2011) arrived at the same conclusion based on a worldwide literature review.

5.4.5 Training

Training of the unemployed is the main spending category of training. Spending on training has increased hugely in a few countries. Risks are involved if expansion occurs too rapidly: the additional training programmes might suffer less focus, quality and recognition on the part of the employer. Chapter 1 also concluded that short training programmes without focus on skills required in the labour market may not be as effective in general. This argument applies more strongly when a crisis hits its peak and fewer employment opportunities are available as the training comes to an end. Indeed, there is direct job creation for the purpose of consolidating skills acquired during the training in the absence of regular jobs in Belgium, Luxembourg, Lithuania and Slovenia, according to the LMP database.

Whilst it is inadvisable to expand training too rapidly and with insufficient focus, there is an important argument to increase training during a crisis, when some occupations become unviable and workers need to be trained for new occupations. This applies specifically to older workers in

¹⁹⁶ Financing and operating active labour market programmes during the crisis, background paper 2010, Eurofound.

¹⁹⁷ Active labour market policies for the Europe 2020 strategy, ways to move forward background paper.

some old occupations, as concluded in Chapter 1. To ensure that training focuses on skills required after the crisis, a labour market information system is called for. In this light it is interesting to note that De Graaf-Zijl (2006) finds that training and self-assessment programmes in themselves are ineffective in guiding social assistance beneficiaries to work, but that a huge gain in additional jobs was achieved when training was combined with job search assistance.

As regards the training of employed, a requirement for employers to train the employees as part of short-time work measures is an innovative measure and places the (financial) responsibility for training costs with the employer. This requirement does not seem to be much of an impediment to employers; the requirement is likely to be effective as long as the short-time work measure is effective. This is largely the case for workers with permanent contracts. For workers with a temporary contract it seems a costly and ineffective approach. A minimum degree of employment protection, both for employer and employee, might in general be required to make investments in training in employees worthwhile.

In sum, there is no strong reason to discontinue training of unemployed in times of high unemployment, but the focus of training should reflect post-crisis skills requirements in the labour market. Training of employed workers could possibly be effective if their employers bear part of the cost and if the measure is restricted to workers with a certain degree of employment protection.

5.4.6 *Employment incentives*

Most countries have not increased expenditures on employment incentives to any large degree, at least not in 2009. Poland, Denmark and Greece are the most notable exceptions investing more in work experience places in 2009. This comes with the lock-in risk of workers searching less actively for other regular jobs. The use of employment incentives should therefore be temporary and terminated as soon as the economy improves in order to shift focus to re-employment in regular jobs. Employment incentives are generally provided in the form of recruitment incentives to employers and the case for this form is even stronger in times of crisis, when employers are more reluctant to hire workers. Employment incentives could furthermore help to provide young workers with work experience in times of crisis. A rationale behind recruitment incentives is to prevent long-term unemployment of vulnerable groups, but they come with a high risk of deadweight loss.

Incentives to retain workers are even more costly, since they are generic by nature and apply both to workers who might have been dismissed and workers who would have been retained.

In times of high unemployment, there is no strong rationale for employment incentives to employees or for in-work benefits, unless as a means to combat informal work, especially since enforcing formal jobs is extra costly in times of high unemployment. To be worth the investment to combat informal work, registration of workers who receive the incentives is paramount.

In the previous chapter, we concluded that at best there are mixed results on the effectiveness of employment incentives and if anything can be concluded, it is that employment incentives need to be carefully designed. This does not seem a recommendation for employment incentives as a quick crisis measure, and countries have not relied heavily on this measure either, at least not in 2009.

5.4.7 *Supported employment and rehabilitation*

As has been mentioned in the assessment of other measures, vulnerable groups in the labour market have been hit hardest during the crisis. On the one hand, this strengthens the rationale for

supported employment and rehabilitation in times of crisis; on the other hand, budgets can be more constrained at the same time.

One of the key issues regarding supported employment and rehabilitation that has come out of the current crisis is the balance needed between sheltered employment and actual rehabilitation. Certain Member States, especially new Member States, have significantly increased expenditures on sheltered employment and not on rehabilitation. As discussed in Chapter 1, there is reason to suspect that this measure is used by local government to place unemployed or lightly disabled workers in sheltered work places that are funded by the State in order to suppress costs of welfare programmes funded by the municipality. But once the economy picks up, the sheltered employment programmes will not necessarily end and could remain a financial burden on the State. In this respect, rehabilitation might be preferable even if it is ineffective, in the sense that rehabilitation is not a measure to quickly activate disabled workers. An even higher priority is possibly to reduce the incentive of local governments to park unemployed in sheltered work programmes, for example by maximizing budgets per municipality. If sheltered employment has been expanded, provisions should be created to deal with the post-crisis situation.

Several of the Nordic countries have identified the need to reduce sheltered employment costs in response to the crisis. However, rather than increasing rehabilitation tracks, these Member States have announced plans to re-assess whether those currently in sheltered employment may be able to participate in regular employment. This re-assessment primarily reduces expenditures on those who no longer classify as disabled. Considering the heavy impact of the crisis on vulnerable groups, it is unlikely that large groups of those formerly in sheltered employment will now be able to find regular employment.

5.4.8 *Direct job creation*

Some new Member States have rapidly expanded direct job creation, especially Hungary. OECD (2009) argued that direct job creation could be a useful backstopping labour market measure during a crisis, to prevent vulnerable groups from being disconnected from the labour market for too long.¹⁹⁸ Nevertheless, Chapter 1 concluded that direct jobs are very costly because of the limited outflow into regular jobs, a risk when the economy improves and people are needed in higher-productivity jobs. Moreover, there are less costly alternatives to direct job creation in the EU.

Also, evaluation studies reviewed in this report indicate that local governments use State-funded directly created jobs as a measure to park unemployed workers and suppress expenditures on their own welfare programmes, as is also the case for sheltered work as discussed previously. Maximum budgets could be set per municipality to reduce the risk of parking and directly created jobs could be made temporary to reduce the risk of people staying in those jobs when the economy improves.

One particularly effective use of directly created jobs could be to offer them at minimum wages to workers suspected of informal jobs, as German evaluation studies indicate. This use of directly created jobs could be much more effective than sanctioning in times of crisis because of the high costs involved in monitoring job search when fewer job opportunities are available.

¹⁹⁸ Tackling the jobs crisis, the labour market and social policy response OECD September 2009.

5.4.9 *Start-up incentives*

Expenditures on start-up incentives have increased in Mediterranean countries and some new Member States as a response to the crisis. However, there are still not many participants. People and banks may judge starting a business in an economic downturn to be too risky and a relevant question is whether employment services are better positioned to judge the viability of a start-up.

Little use is therefore made of start-up incentives, but could scaling up this measure be an appropriate response to the crisis? This would deviate from the current practice of offering start-up incentives to selected persons and will have major an impact on social security. As discussed in Chapter 3, self-employed have little access to social insurance in most countries. Whilst it is true that self-employed may still have half of their commissions in a time of crisis instead of being fully unemployed if dismissed by an employer, uninsured self-employment increases the risk of poverty compared to insured employment of employees. If promotion of entrepreneurship leads to a loss of social insurance, a cost-effective means to maintain consumer demand is lost as well. Social insurance for self-employed workers should at least be reconsidered when entrepreneurship is promoted.

Another rationale for scaling up start-up incentives could be that entrepreneurs operate more flexibly on new markets than employees. A pertinent question is whether everyone can be an entrepreneur. Perhaps a local experimental approach to scaling up start-up incentives could provide answers. However, such an approach must be carefully designed, if only because people from elsewhere could settle in the experimental region. But also, start-ups need loans, and the risk of default might be larger if start-up incentives are scaled up.

In sum, whilst start-up incentives can be highly effective according to evaluation studies when applied selectively, an expansion of this measure seems unadvisable without further evidence, especially in times of crisis.

5.5 Conclusions

Out-of-work income support

In all EU countries, with the exception of Germany, the unemployment rate increased in 2009 and often in 2010 as well. However, countries responded very differently to the crisis, depending on their institutional setting. Countries with ungenerous welfare systems tended to extend access to benefits early in the crisis, especially in Italy and some new Member States and the US outside the EU. Other countries reduced access or maximum benefit durations. These countries are harder to classify and the reductions are as often as not part of structural reforms planned long beforehand (Denmark, Sweden, Poland). But in Ireland and Lithuania the reductions were definitely a response to the crisis to maintain government budgets.

Other countries did not reform the social security system at all in 2009 or later, with the exception of short-time work benefits discussed later. Of these countries, some have a high level of employment protection, i.e., Germany, Austria, the Netherlands for older workers and Japan outside the EU. Finally, a group of countries temporarily extended access to specific target groups, not in 2009 but later in 2010. Some of these countries have a strongly segmented labour market with an increased risk of social exclusion, including Spain, Portugal and Slovakia.

Obviously, conclusions must take into account the different institutional settings and reactions in the EU. To start with the countries with ungenerous systems, broadening access to benefits in times of crisis creates a free rider problem, i.e., workers who have not paid (sufficient) contributions do

receive benefits after all. Sooner or later, either the rates or the base of taxes or contributions in these countries need to be increased to reduce government debt again. If the tax (or contribution) base is increased, specifying exactly to which types of employment contracts the extension applies is not the preferred approach, as it is open to abuse by employers who define new types of employment contracts. A more advisable approach is to define “apparent employment relationships” or “assimilated workers”.

For the countries that reduced access to or durations of benefits, the impact depends in particular on social assistance and family allowances. In Lithuania, the Czech Republic and Poland these reductions are likely less effective since the low flat-rate unemployment allowances are simply replaced with social assistance. The experience of the UK is also relevant: the use of disability benefits increased sharply in 2008 and 2009, as well as means-tested benefits such as family and housing allowances, all of which had to be financed out of the central government budget. In Ireland, unemployment allowances were more generous and the reductions likely reduced costs effectively. The reductions of the maximum benefit durations from four to two years in Denmark and Sweden are likely to further improve the sustainability of social insurance, whilst the welfare system still provides a relatively generous minimum income after the expiration of the benefit, with continued requirements to search and accept jobs.

A second approach to maintain the affordability of social security is applied by a third group of countries that extended maximum benefit durations to specific vulnerable groups when the crisis deepened in 2010. This approach combats social exclusion in its own right. It also keeps vulnerable groups in the habit of job searching if the alternative would be social assistance without job search requirements. A more structural solution would be to extend job search requirements to social assistance.

A recommendable approach, therefore, seems to be a universal approach, whereby income support provides moderately generous to smooth consumer demand, as long as adequate requirements are in place to search and accept jobs, not only for unemployment benefits but for social assistance as well. Generous social assistance with these requirements is by economic logic more activating than family and housing allowances without these requirements. There is no hard evidence that moderately generous income support smoothens consumer demand, partly because social protection has many elements that are hard to factor in and partly because consumption likely depends on many other factors. Also, more generous social protection takes time to implement because it needs to be backed up with funds. This is even more so if employment protection is reduced as well in a move towards the flexicurity concept. This is clearly shown by the experience of Estonia, where dismissals were made easier in 2009 without having increased contribution rates years in advance.

High employment protection could be an alternative to achieve an affordable social security system such as in Germany and Austria. Whilst OECD studies show that unemployment rates on average tend to be higher in countries with higher employment protection, employment protection also comes with certain benefits such as incentives to invest in training of skills, and a delay, and possible avoidance in a short recession, of a rapid increase of unemployment rates from the start of a recession. But to avoid segmentation of the labour market, employment protection should be universal, and not only for “permanent” contracts which employers will then seek to avoid.

Finally, some EU countries have introduced sanctions, mostly to combat informal work. Literature on the effectiveness of measures suggests, however, that sanctions are extremely costly to monitor in times of high unemployment when there also fewer job opportunities. Recent evaluations

consider offering direct jobs at minimum wages to beneficiaries suspected of informal work as a more effective means to combat informal work.

Short-time work

Short-time work measures have been adopted in many countries. They are an effective alternative to dismissing workers in countries with high employment protection, such as Germany. In countries with low unemployment protection such as Spain, employers use the option they already have, namely the dismissal of workers. Employers are required to pay at least half of the wages because otherwise the short-time work benefit is more an unemployment benefit without job search requirements, as in Spain, Portugal and Finland. Moreover, short-time work measures are effective in preventing prolonged subsidization if the crisis can reasonably be judged to be temporary.

Early retirement

The debate on early retirement reforms continues in Member States that have early retirement. In some countries, early retirement reforms are being adopted sooner than originally planned. However, not only early retirement needs to be reformed; the same applies to the labour market of the elderly, most notably extra employment protection of older workers, longer unemployment benefit durations for older workers and the increasing wage profile with age. Countries that wait till 2020 or later to start increasing retirement age should in the meantime reform the labour market of the older workers, while early retirement still cushions off the worst effects. Also, the real challenge is the sustainability of the old age pensions, amounting to 11 per cent of GDP compared to 0.3 per cent of GDP for early retirement in 2009.

Labour market services

Expenditures on labour market services has been increased in most countries, notably through hiring more labour market service staff and making use of EU funding. Job counselling is geared more towards vulnerable groups. A rationale is to keep them in the habit of job search. Nevertheless, in a crisis, job counselling could focus more on mapping skills needed by employers, on referring the best candidates to the jobs and on referring candidates with fewer opportunities to training.

Structural reforms are being implemented, notably in France. However, not much gain should be expected from reforms organizational reforms within labour market services. In Chapter 3 it was argued that a bonus for effective placement awarded to the actor investing in labour market services is more likely to incentivize effective investment than assigning responsibilities to organizations.

Training

The main type of training is training of the unemployed and those about to be unemployed. Training of unemployed has increased in the post-2008 crisis. Effects of training are generally not observed in the short run, partly due to the lock-in effect of training, if workers do not apply for jobs during training. Training is more likely to be effective and even cost-effective if it is not too short and teach skills needed on the labour market. Short training programmes are even less likely to be effective in a crisis when fewer job opportunities exist. Guarding the focus and quality of training programmes and recognition of trained skills by employers is especially important when training programmes are expanded rapidly. The focus should rather shift a bit to training older unemployed workers in unviable professions. To further enhance the effectiveness of training, it should be followed by job search assistance.

Training of employed has been a requirement for employers who apply a short-time work measure in a number of countries. An argument for why employers should remain responsible for the training of their employees even in times of high unemployment is the high risk of deadweight losses.

Employment incentives

Employment incentives are generally provided to employers and the case for recruitment subsidies is even stronger in times of crisis when employers are more reluctant to hire workers. Employment incentives have generally been expanded in the post-2008 crisis. Of all the measures, employment incentives to recruit workers have been most geared towards vulnerable groups as a response to the crisis. The underlying rationale is to prevent long-term unemployment of vulnerable groups. However employment incentives come with a high risk of deadweight loss, and even without deadweight losses there is not much to recommend employment incentives to increase the overall level of employment. If employment incentives are expanded to offer work experience to young workers in times of crisis, the measure should be discontinued when the economy improves to increase re-employment in regular jobs.

Incentives for retaining workers are even more costly, since they are generic by nature and apply both to workers who might have been dismissed and workers who would have been retained.

In times of high unemployment, there is no strong rationale for employment incentives to employees, unless as a means to combat informal work, especially since enforcing formal jobs is extra costly in times of high unemployment. To be worth the investment to combat informal work, registration of workers who receive the incentives is paramount, but literature indicates that offering direct jobs at minimum wages to those suspected of informal work could be more effective.

Supported employment and rehabilitation

Expenditures to support employment of disabled workers have increased strongly in some new Member States. This points to a risk of large-scale parking of able workers in sheltered programmes by municipalities that bear the cost of social assistance whilst the costs of sheltered workplaces are borne by the central government. This creates deadweight loss that should be prevented.

Sweden and the Netherlands seek to reduce the number of registered disabled workers through a reassessment of the degree of disability. An increased outflow of vulnerable groups into work is less likely when unemployment is high, but costs are still reduced because benefit levels in social assistance are lower.

Direct job creation

Direct job creation has not been applied extensively in the post-2008 crisis. Countries seem to be well aware that direct job creation is costly and comes with a high risk of deadweight loss. As with sheltered workplaces, there is the risk of local governments parking unemployed in State-funded directly created jobs.

Start-up incentives

Start-up incentives are a small spending category for a specific group, and spending has not been expanded much during the crisis. An explanation may be that during a crisis, entrepreneurs may be more hesitant to start a business. Reforms for business start-ups have focused on reducing administrative requirements. Start-up incentives seem more appropriate at a time when the economy picks up, although then the risk of deadweight loss is higher as well.

6 Overall policy conclusions

6.1 Introduction

This chapter seeks to answer the key questions of the study by presenting the main findings, drawing conclusions from the findings at a more general level, and then formulating recommendations for policy and for research. The study comprises five parts, including rationales for active and passive labour market measures, expenditure trends, funding, effectiveness before 2008 and new measures since 2009. Each part addresses the research questions of the previous chapters. The policy recommendations are based on the questions presented below.

1. What institutional settings should be adopted or avoided in order to ensure effectiveness of measures?
2. What is the best articulation of active and passive policies?
3. Depending on the business cycle, how should active and passive labour market policies be designed and applied, taking into account affordability and (cost) effectiveness in times of crisis?
4. What funding arrangements work best as automatic stabilizers?
5. Is there a more efficient way to fund the expenditures, or a way that would be more resilient in a period of economic downturn?
6. Is substitution acceptable as a means of redistribution in times of crisis?
7. Has flexicurity proven to be a useful concept for coping with a crisis?
8. What are the impacts of labour market policies with regard to vulnerable groups? Does this vary with the business cycle? How can youth unemployment and long-term unemployment best be tackled?
9. What are the top priorities for active and passive labour market policies in the next ten years? What would be new structural reforms, also taking into account the budget crisis?
10. What can be recommended with regard to the European Employment Strategy 2020 based on our findings?
11. How can policy implementation allow for better evaluations, and what requirements should evaluation studies meet?

6.2 Main findings

6.2.1 Rationales

Two types of rationales can be distinguished for labour market policies: the aim of various programmes, as derived from the Eurostat LMP database, and the socio-economic logic behind the aims. The latter also points to some risks inherent to these measures.

Aims

The rationale behind the majority of **passive measures** is to insure against loss of income, although especially in Mediterranean countries and new Member States the main rationale is to guarantee a minimum income. A third rationale for passive measures is to maintain jobs, in the form of short-time work. This rationale occurs less frequently and with far lower expenditures. Income support to enable workers to participate in active labour market policies is seldom the main rationale for passive policies. Reallocation of unemployment, for example the substitution of young or unemployed workers for older workers, may originally have been a rationale behind early retirement schemes. Presently this is mainly the case in Mediterranean countries, either to replace retiring workers with unemployed workers or in the case of restructuring to maintain the jobs of young workers. However, the most frequent rationale for early retirement is to facilitate inactivity

which is considered unavoidable at the time, or to enable workers to work fewer hours instead of retiring completely.

There are various rationales for **active measures**. For labour market services, the rationales are very diverse and specific and depend highly on institutional arrangements. In general, labour market services are classified as information services on vacancies, job orientation (which occupation suits best), job counselling (practical help to find a job) and administration of active and/or passive measures. For training, the most frequent rationale is to provide workers with occupational skills to improve their chances of finding or maintaining a job and employability in general. The main rationales for direct jobs are to offer temporary work experience and for unemployed to be active in services that are useful to the community. The main rationales for employment incentives are the re-integration of (certain categories of) the unemployed and disabled, and temporary work experience in regular jobs. For supported work the rationale is to provide sheltered/adapted work in some countries and to prepare disabled workers for regular work in other countries. In some countries, the aim is to apply a tailored mix to optimize the opportunities for work.

Economic logic

The logic behind most **passive measures** is closely linked to the incidence of a minimum wage. The pioneer trade unions arranged contributions and unemployment benefits to be able to collectively withhold labour supply to uphold minimum wages. A further economic logic behind out-of-work income support is that collective insurance against the risk of lost income during unemployment is far less costly than private savings to cover the risk of lost income and poverty. This logic applies both at the individual level and at the national level, since lower savings imply higher consumption, which is a main driver of economic growth. Therefore, passive measures also function as an automatic stabilizer to maintain consumer demand in a time of crisis. For early retirement, the economic logic to insure loss of income is less clear, since it is a collectively funded arrangement that workers could see as an entitlement rather than a risk to avoid.

Active labour market policies seek to address labour market inefficiencies by strengthening the labour force and enabling occupational mobility through training, to re-integrate unemployed workers through financial incentives before workers become discouraged or by offering temporary work in direct jobs or sheltered workplaces, and sometimes by offering socially useful work instead of regular jobs to those who are hardest to re-integrate.

Potential risks

Passive policies entail the risk of an unemployment trap: people are willing to work but not for the wages employers are willing to pay. This risk is largest for lower-skilled workers. This risk for lower-skilled workers is greater than fifty years ago, when most workers were low-skilled and unemployment was a similar risk for anyone. Because the share of low-skilled workers has become smaller, they face the worse risk of social exclusion and lifetime unemployment.

The risk of active measures is that they are not effective in increasing employment, due to the possibilities of deadweight loss (would the unemployed find a job without help?), substitution of other workers within the company or displacement of workers in other companies.

6.2.2 Expenditures on labour market policies

The overall trend of expenditures on labour market policies between 1990 and 2009 is that expenditures on passive measures are countercyclical but with an overall downward trend. Expenditures on active measures have become much less countercyclical since the early 1990's

and are strongly affected by the introduction and discontinuation of measures. The cyclical nature of passive measures implies a need to prepare for higher expenditures during recessions. For active measures the results indicate a need for evaluation to avoid premature discontinuations after disappointing results.

At the country level, countries with the strictest targeting and the lowest expenditures on passive measures tend to extend eligibility the most in recessions, in particular in 2009. Between the EU, Japan and the US this applies to the US (extension of maximum duration), and within the EU this applies to Estonia and Italy (broader targeting). On the other hand, expenditures on passive measures were much lower in 2009 than in 1992/1993 in the Scandinavian countries, Germany and the UK, despite unemployment rates that were not far from the 1992 rates. The Scandinavian countries and Germany implemented major reforms to make benefits more activating. These reforms combined a reduction of the generosity of benefits with requirements to search and especially to accept jobs, although income support in Scandinavian countries is still among the most generous in the EU. The UK sought to achieve the same through continuous reforms of public employment services. These reforms were effective in reducing costs, since expenditures on other social policies such as family and housing allowances also decreased in the same period, although expenditures on disability benefits rose back to their 1996 level from 2007 to 2009.

The trends between the various labour market policies also indicate a shift in focus towards (effective) job placements and incentivizing regular job matches: the shares of expenditures on training, early retirement and direct jobs declined in favour of labour market services and employment, and start-up incentives. In recessions, expenditures on training and subsidies for preserving jobs tend to increase, in 2009 partly in the new shape of short-time work. A rapid expansion of active measures as in Poland, Hungary and Slovenia in 2009 might have limited the increase of the unemployment rate, but if so, it is at the cost of higher expenditures.

6.2.3 Funding and implementation

The primary aspects of funding and implementation considered here, are how funds are raised and which institution is responsible for implementation. Less visible but not less important are institutional settings such as the arrangements between stakeholders, budget mechanisms, and incentives.

Typology of institutional settings

Funding and implementation of **passive labour market policies** depend on institutional settings, for which an old classification is still helpful:

- A Bismarckian system of local and industrial social security funds ensuring wage-related benefits regulated by the central government in Continental and Mediterranean countries;
- A Beveridgean system where social security revenues and expenditures on basic flat-rate benefits are for account of the central government, in Anglo-Saxon and new Member States;
- A Scandinavian system with a mix of voluntary wage-related insurance managed by tripartite social security funds, and a compulsory flat-rate unemployment assistance provided by the State to those not voluntarily insured.

Sources of funding

Active and passive measures are both mainly funded through general taxes and social security contributions, but the share of general taxation is higher for active measures. In theory, funding through general taxes enables a wider trade-off between labour market policies and other government expenditures as in the Beveridgean system. However, in practice expenditures on passive measures tend to increase during recessions even if funded through general taxation (new

Member States, Anglo-Saxon countries). Social security contributions are also compulsory as are taxes in most countries, except for voluntary wage-related insurance in the Scandinavian countries. Also, central governments regulate passive and active measures, even if funded through social security contributions and even in the Bismarckian system. Regulations issued by the central government seem to determine budget decisions more than the source of funding.

What could matter more is the ability to make money available during recessions by selling assets or by borrowing on the financial markets. However, most of the funding of any labour market policy comes from the revenues of the then-current year, whether they be social security contributions, general or earmarked taxes. To fund extra expenditures in times of high unemployment, either the contribution rates of social security funds must have been sufficiently high to invest surplus revenues, or tax rates must have been sufficiently high to reduce government debt. Therefore, a realistic anticipation of future expenditures seems more important to continue delivery of labour market policies in times of high unemployment than the source of funding. This is especially true for countries with limited access to passive policies in times of low unemployment, since these countries tend to extend eligibility in times of high unemployment (Estonia, Italy, the US).

Early retirement is generally funded through the same source as out-of-work income support. But this does not imply that this could endanger out-of-work income support in an ageing labour force. Expenditures on early retirement have been reduced from 0.28 per cent per cent of GDP in 1992 to 0.08 per cent per cent in 2009, compared to a change from 1.5 per cent per cent to 1.3 per cent per cent of GDP for out-of-work income support. Expenditures on early retirement are almost negligible compared to expenditures on old age pensions, which amounted to 11 per cent per cent of GDP in 2009. Thus, early retirement reforms should be seen as a necessary first step to ensure the sustainability of old age pensions in an ageing society.

Implementation and decision-making

Implementation of active and passive labour market policies is in the same hands in some countries. In theory, this could improve cost-efficiency and enable better alignment of active and passive policies. On the other hand, there is a risk that social security funds do not develop policies for the unemployed with a short maximum benefit duration but leave that to governments responsible for social assistance after the unemployment benefit expires. More often, labour market policies are implemented by public employment services. They have the advantage of knowing the (registered) job vacancies and have no disincentives to deliver services to non-beneficiaries.

However, when funds are low, it is too late to raise tax or contribution rates because expenditures rise faster in times of high unemployment. All that is left then is to shift budgets, which requires flexible arrangements regardless of which institute implements the labour market policies.

Furthermore, the actor investing in active measures should be rewarded for success. Social security funds, especially in the Bismarckian system in Continental and Mediterranean countries, do not necessarily have an incentive to apply an active measure shortly before the unemployment benefit expires, even if it would be effective in preventing social assistance. A more effective reward could be to award a bonus for job placements to the provider of the active measure. A particular risk is that local implementers “park” beneficiaries in centrally funded measures. The combination of local implementation and central funding exists mostly in Mediterranean countries, and for ESF funds which have an increasing role in new Member States. In the case of direct jobs a solution could be to work with strictly capped budgets rather than open-ended budgets. A solution for other active measures could be to work with result-based funding, i.e., 50 per cent of costs are funded only after job placement.

In sum, the main finding of the funding analysis is that sufficiently high tax or contribution rates are more important than the source of funding for ensuring the availability of funds in times of crisis. If funds are low, flexible arrangements and close monitoring of budgets seem important. Finally, incentives for investing in active measures are important regardless of which institution implements the measure.

6.2.4 *Effectiveness of measures before 2008*

Passive measures tend to prolong unemployment durations if benefit levels are higher or maximum benefit durations are longer. Out of work income support, however, cost-effectively insures workers against loss of income. The alternative would be private savings, resulting in a great loss of utility due to long postponed consumption. By economic logic, this implies that a moderate degree of generous benefits smoothens consumer demand, but there is no reliable empirical evidence to support this. Evidence on wages of unemployed workers who find a job is scarce and indicates lower rather than higher wages as the unemployed spell lengthens. This means that the rationale behind higher benefit levels to enable the search for higher quality job matches is not yet supported by evidence. There seems little to recommend early retirement, as this measure prompts workers to leave the labour market earlier without resulting in, e.g., higher youth employment.

Active measures are more varied. Whilst all types of measures have been more or less evaluated in the literature, some impacts still remain to be identified. In particular, deadweight losses (the participant would have found a job even without the measure), substitution (the employer replaces employees with participants), displacement (employees in other companies lose jobs), and the macroeconomic feedback of higher labour costs to finance active (and passive) measures are seldom identified.

Job search assistance is an active measure that is quickly cost-effective as it costs little. The more intensive measure of job counselling is cost-effective too. For non-vulnerable groups intensive job counselling is better applied after a few months to avoid deadweight losses for the unemployed who would have found a job in the first months on their own. Also, the benefits of job search assistance and counselling tend to be underestimated as they result in higher quality job matches, which most evaluations do not take into account. Monitoring and administrative reforms can enhance cost-effectiveness of job search assistance and active measures in general, but not much and less so in times of high unemployment.

Training is effective and also cost-effective under certain conditions. A key factor in determining effectiveness is focus on skills needed in the labour market. Even if focused on skills needed in the labour market, training is not necessarily effective in the short run, but it tends to be in the mid-term. Differences in effects of training between socio-economic groups turn out to be minor if the evaluation period extends to the mid-term.

Employment incentives are a heterogeneous group of measures typically aimed at specific target groups rather than at higher overall employment. Even to achieve increased employment of only the targeted group rather than overall employment, the design of the measures is crucially important. In particular, applying employment incentives to long-term unemployed reduces the risk of deadweight loss. Even lacking an increase of overall employment, employment incentives can have an advantage over sheltered work or directly created jobs by being less costly.

Sheltered work provides meaningful activities to disabled workers, but also persons with little or no disability indications are sometimes referred to sheltered work. Rehabilitation does not lead to regular employment in the short run, but even in the longer run evidence is mixed. Voluntary rehabilitation seems more effective but has a smaller reach than compulsory rehabilitation. Cost-effectiveness depends on the generosity of the disability benefits and turns out positive in the UK but negative in the Netherlands.

Directly created jobs reduce the outflow into regular employment. This results in displacement of regular jobs by directly created jobs. The real cost of this displacement is not the wage sum of the directly created jobs, but the typically much higher foregone productivity in regular jobs. A little applied but apparently effective use of directly created jobs is to offer such a job at minimum wages selectively to persons suspected of having an informal job, with the aim to terminate benefits if the job is refused.

Start-up incentives are offered to a selected group of people who are judged able to support themselves through self-employment. Start-up incentives appear highly effective for this group, but this result cannot necessarily be generalized to the whole population. Also there is a risk of deadweight loss of entrepreneurs who would also have started their business without the initial subsidy.

6.2.5 Measures since 2009

On the basis of Eurostat data for 2009 and publications of the OECD, the Commission, Eurofound and ILO, we describe below the changes in expenditures and measures introduced since 2009.

Out-of-work income support

Countries with ungenerous benefits tended to expand eligibility in 2009 and later. Reactions of other countries also depend on institutional settings, including extensions for specific vulnerable groups in some countries with segmented labour markets. Reductions of benefits in 2009 and later had been planned earlier in most countries. Still, in two EU countries reduced benefit levels and/or durations were prompted by severe budget restrictions.

Short-time work

Short-time work was used most intensively in countries with high levels of employment protection. Most countries maximized the hours reduction that could be compensated by unemployment benefits. Some countries, however, allowed a 100 per cent reduction of working hours and in those countries short-time work schemes were used as an unemployment benefit without termination of the employment contract, notably countries with segmented labour markets.

Early retirement

A number of countries have adopted early retirement reforms to reduce eligibility, to increase funding or to incentivize postponed retirement. These new reforms include the introduction of new contributions for employers in certain industries (Hungary), lower contribution rates for older workers past the age of eligibility (Belgium), allowing the accumulation of pension through income from work (France) and in several countries increasing the age for eligibility for the old age pension.

Labour market services

Expenditures on labour market services have increased in most countries, notably through hiring more labour market service staff and making use of EU funding. Job counselling is geared more towards vulnerable groups. Structural reforms are planned notably in France, where the delivery of active and passive benefits is being integrated, with a focus on more individualized services.

Training

Expenditures on all forms of existing training schemes have increased during the crisis. The introduction of new training programmes in response to the crisis occurs less frequently, although some countries introduced training of workers in sectors that are being restructured (Spain, Lithuania, Poland) and for sectors that were expected to grow after the crisis (health and social care in Belgium and the UK).

Employment incentives

Expenditures on employment incentives have generally increased during the post-2008 crisis. In response to the crisis, employment incentives to recruit workers have been better geared towards vulnerable groups. Some countries have introduced bonuses for workers who accept (formal) jobs in order to combat accumulation of benefits with side jobs on the informal market due to insufficient staff to monitor benefit recipients and detect fraud.

Supported employment and rehabilitation

Expenditures to support employment of disabled workers have increased strongly in some new Member States. In most other Member States expenditures on this type of measure remained the same. Sweden and the Netherlands were the only countries to introduce changes in this area, seeking to reduce the number of registered disabled workers through a reassessment of the level of disability.

Direct job creation

Expenditures on direct job creation were quite constant since 2009 with the exception of Hungary where this measure was expanded rapidly.

Start-up incentives

Start-up incentives are a small spending category for a specific group and spending has not increased much during the crisis. Reforms for measures stimulating or facilitating business start-ups by unemployed focused in particular on reducing administrative requirements.

6.3 Conclusions

6.3.1 *Passive measures*

Rationales and effectiveness

The main rationale for passive measures, mainly out-of-work income support, is public provision of insurance against loss of income due to unemployment. Combating poverty and providing more equity of income are other, more social reasons for out-of-work income support, as part of a wider system of social protection including family allowances, disability benefits, housing allowances and social assistance. Out-of-work benefits are very valuable as a cost-effective means to insure workers against loss of income because private savings would result in a great loss of utility due to long postponed consumption. An estimated utility gain of cost-effective public insurance outweighs the calculated costs caused by prolonged unemployment durations. Out-of-work income support seems to increase the inflow into unemployment, however this negative effect is not decisively quantified. Out-of-work income support is likely to maintain consumer demand but again the literature lacks reliable empirical evidence.

Activating elements

The effectiveness of activation requirements in out-of-work income support is better known. Reforms to make job search and acceptance requirements more strict and to extend them to other benefits as well appear successful in reducing expenditures without increased expenditures on

other benefits. Some of the literature based on international comparisons, notably Coquet (2011), argues that requirements to search and accept jobs are more important for re-employment rates than benefit levels and durations.

Responses to the crisis

Particularly Italy and some new Member States have less generous benefit systems in place. These countries extended eligibility rapidly in response to the recent crisis. This involves a certain free rider risk of some groups receiving benefits without having paid contributions. To avoid this, a more universal approach to out-of-work income support seems advisable, preferably based on “assumed employment relations” or “assimilated workers” and not on different types of employment contracts. Reducing unemployment benefits in response to a crisis mainly has the effect of shifting expenditures from unemployment benefits to social assistance, as was the case in Lithuania.

Early retirement

A rationale for early retirement that is mostly evident in Mediterranean countries is that older workers make room for younger workers by withdrawing early from the labour market. However, according to evaluations, early retirement does not contribute to youth employment. Another rationale is to facilitate inactivity, in particular in some Nordic countries. An underlying rationale could be to save expenditures on active measures for older workers with few employment prospects. However, as early retirement prompts workers to retire years in advance, it is a costly measure. Most EU countries already have reduced expenditures on early retirement, from an average 0.3 per cent of GDP in 1992-1994 to an average 0.08 per cent of GDP in 2006-2009. There is no evidence of increased use of early retirement as an alternative for unemployment benefits, at least not in 2009.

Most EU countries plan to further reduce early retirement benefits. However, the bigger challenge for an ageing society is the funding for the old age pension past the legal retirement age, on which 11 per cent of GDP was spent in 2009, compared to only 0.08 per cent on early retirement benefits.

Restricting early retirement does not necessarily lead one-on-one to higher employment of older workers, as unemployment is still an alternative, with often longer maximum benefit durations for older workers, whilst wages that increase with age and a high degree of employment protection for older workers may make companies reluctant to recruit older unemployed workers. Labour market reforms for older workers should therefore be considered at the same time.

Short-time work measures

Short-time work measures enable workers to draw an unemployment benefit for reduced working hours while being employed for the other hours. This measure has been newly introduced or rapidly expanded in response to the latest recession, and as a consequence is less rigorously evaluated yet. The measure seems to have been effective in countries with a high level of employment protection for the whole population. In countries with a segmented labour market where temporary workers have little employment protection, employers had and used the option to dismiss temporary workers. Inducing employers to make use of the measure by paying the full wage salary as long as the employment contract is not terminated, seems not effective, because that amounts to an unemployment benefit without job search requirements. This kind of measure should be temporary, but according to Hijzen and Venn (2011)¹⁹⁹ there is a risk of prolonged use in Finland, Italy and Spain due to long durations of short time work exceeding two years.

¹⁹⁹ Hijzen, A. and D. Venn (2011), The Role of Short-Time Work Schemes during the 2008-09 Recession, OECD Social, Employment and Migration Working Papers, No. 15, OECD Publishing, <http://dx.doi.org/10.1787/5kgkd0bbwvxp-en>, page 36

6.3.2 Active measures

Rationales

Active measures are expected to overcome disincentives of passive measures and market failures such as non-transparency and discrimination due to (perceived) lower productivity of disabled, younger and older workers. The main disincentive of passive measures is that there can be minor differences between benefits and wages for low-skilled workers who are willing to work but not below the minimum wage. Compared to fifty years ago, the demand for low-skilled workers has decreased, which has led to an increasing risk of social exclusion for this target group. Hence, the primary rationale for most active measures is to increase employment, but the reduction of social exclusion is a secondary aim and for some active measures even the primary aim.

Effectiveness

The effectiveness of the six groups of active measures distinguished in this report is assessed in terms of re-employment rates of participants in comparison to non-participants, taking into account institutional settings, and comparing the effectiveness with the costs involved. Some other effects of active measures not included in most evaluation studies are discussed at the end of this section.

Labour market services

Job search assistance and counselling are cost-effective and should be applied to vulnerable groups from the start, to avoid diminishing job prospects as the unemployment spell lengthens. For groups that are expected to be able to find a job on their own, job search assistance should initially cover only basic services to avoid deadweight costs of intensive counselling. Job search assistance should be continued in times of crises when fewer job opportunities are available, if only to keep the unemployed in the habit of searching for a job when the economy picks up again. Job search monitoring is less effective in times of crisis when unemployed need to search harder for the fewer available job opportunities. Administrative reforms such as planned by France in 2010, could in principle reduce expenditures, but not by much from previous Dutch experience.

Training

Training is effective for all groups of unemployed workers who lack specific skills that are required in the labour market. Training comes with large lock-in effects because people in training generally do not apply for jobs in the meantime. Job placement rates should therefore be targeted at and evaluated for the mid-term, to avoid the typically less effective types of short training programmes. Training is more costly than job search assistance and offering training after a few months avoids higher potential deadweight losses. In times of crisis, a particular group for which training seems to be effective consists of workers who have lost a job in an unviable profession. These are typically older workers. However, a rapid expansion such as possibly in Poland in 2009 comes at the risk of loss of quality, focus and recognition of trained skills by employers; training in Spain has been criticized for this reason. Employers can train their own employees to avoid teaching employees skills that employers do not need, or teaching skills the employers need but would have invested in even without the programme.

Employment incentives

Employment incentives seem to be more effective in promoting the employment of specific groups than in increasing overall employment. The deadweight loss risk of persons finding a job they would have found even without the subsidy is particularly high for this measure. Targeting employment incentives at long-term unemployed who were unable to find a job in the first 12 months on their own, reduces this risk. An old Hungarian study indicates that some employers wait to recruit unemployed until the subsidy is available, in this case after six months of unemployment.

Employment incentives to promote the creation of more permanent jobs compared to temporary jobs seem effective in the short run but not in the long run. Therefore, other and more structural solutions should be sought to reduce segmentation of the labour market, such as reducing the legal differences between different employment contracts, or to allow only one or two types of employment contracts. Three countries used employment incentives to provide young workers with work experience in response to the 2009 crisis; but the outflow out of work experience posts in the past was low in other countries.

Sheltered work and rehabilitation

Sheltered work offers meaningful activities to disabled workers. The main risk involved is that sheltered work is offered to workers who are not or only slightly disabled, since the outflow out of sheltered work into regular jobs is low. This risk of “parking” workers was apparent in 2009 in some new Member States, suggesting that local governments referred large groups of workers to State-funded sheltered work to save expenditures on local welfare programmes. Rehabilitation, like training, is not effective in the short run; evidence on effects in the mid-term is scarce. Rehabilitation is cost-effective if disability benefits are high and indefinite and if participation is voluntary, as observed in evaluation studies and explained by self-selection of motivated voluntary participants. Of course, voluntary participation reduces the reach of the programme.

Direct job creation

Directly created jobs are costly and cause prolonged high expenditures due to the low outflow rate into regular employment even when the economy improves. Displacement of regular jobs by directly created jobs leads to additional costs, because easily twice as much production as that realized in public works is lost. Direct job creation is therefore not advisable as a crisis measure. However, a totally different use of directly created jobs could be highly effective if offered selectively to those suspected of having informal jobs in order to terminate their benefits if they refuse the job.

Start-up incentives

Start-up incentives are effective if offered to a selected group of persons judged to be able to support themselves through self-employment. This measure entails a particular deadweight loss risk of regular start-ups quickly registering as unemployed in order to obtain a subsidy for an enterprise they would have started anyway. This measure seems less appropriate in times of crisis because of the higher risk of business failure.

Methodological shortcomings of evaluations

Most evaluation studies lack a quantification of deadweight losses, substitution and displacement of workers in regular jobs. Furthermore, it is not always easy to identify groups with comparable characteristics among participants and non-participants. Academically, randomized experiments could help address all these problems, if well designed and applied in selected regions, with other regions serving as a control group. Failing that, unavoidable shortcomings of data, econometric methods and surveys with questions on the deadweight loss and substitution effects are likely to result in only indicative results with a high degree of uncertainty.

6.3.3 Funding and responsibilities

The primary aspects of funding and implementation considered here, are how funds are raised and which institution is responsible for the implementation. Less visible but not less important are institutional settings such as the arrangements between stakeholders, budget mechanisms, and incentives.

Passive measures are typically funded through and the responsibility of a combination of social security funds to which employers and employees contribute and general taxes, whereby the funding by the central government is more focused on minimum income support. Central governments fund a larger share of the active measures, but active measures are implemented largely by public employment services for unemployment beneficiaries and by local governments for social assistance beneficiaries.

The main issues that came to the fore during the analysis of funding and implementation arrangements are summarised below.

The alignment of budgets and responsibilities. The alignment of budgets and responsibilities. Where funding and responsibilities are in different hands, it is important to build in incentives to provide measures efficiently. Such incentives involve awarding the actor investing in a measure with a bonus for job placements rather than setting targets only.

Both local governments and Public Employment Services (PES) are involved in the implementation of –passive and active- labour market measures. Local governments have a higher degree of autonomy than public employment services. There is a risk that local governments responsible for social assistance and welfare “park” beneficiaries in centrally funded measures, including direct jobs, sheltered work and disability benefits.

An important goal of funding is to make money available in times of high unemployment. Since at a time of high unemployment, tax revenues are lower and expenditures increase, labour market policies tend to further strain the government budget. To anticipate on higher expenditures, options include (1) increasing tax rates to reduce the government debt and to borrow money on the financial markets when needed, or (2) increasing contribution rates and investing excess contributions in a fund.

6.4 Recommendations

The Commission has recently proposed recommendations based on the Annual Growth Survey 2012.²⁰⁰ On the subject of this study, tackling unemployment and the social consequences of the economic crisis, this communication focuses on mobilizing labour, supporting youth employment and protecting the vulnerable. In the following sections, we consider these recommendations in further detail, and add some recommendations.

6.5 Mobilizing labour

To mobilize labour, the Commission considered that Member States give particular priority to “adapting unemployment benefits further ... to facilitate the return to work”. The evidence gathered in this study enables the identification of priorities for the activation of benefits, with adaptations in decreasing order of urgency:

- Integration of different benefits to avoid the unemployment trap, including accumulation with other benefits such as housing and family allowances;

²⁰⁰ European Commission, Annual Growth Survey, Communication from the Commission, 23 November 2011, COM(2011)815 final.

- Extensions of job search and acceptance requirements for other benefits such as social assistance, disability and widows pensions, direct jobs and possibly supported work in a mild form;
- Reduction of the implicit benefit of a non-working spouse if his or her tax threshold is transferable to the breadwinner;
- Sanctions, preferably discretionary rather than automatic.

The Commission furthermore called for more “effective activation and appropriate training and support schemes”. This can be furthered by:

- Continued job search assistance oriented on employer demand based on sound information systems;
- Training for all groups that lack specific skills needed in the labour market, in particular workers who have lost a job in an unviable profession;
- Controlled expansion of training activities to avoid loss of quality, focus on required skills and skills recognition by employers;
- Mid-term job placement targets for training to avoid less effective short training programmes.

With regard to policies to improve the functioning of the labour market for older workers, the Commission has recommended (quotes in italics):

- *Restricted access to early retirement schemes and other early exit pathways*; this is an on-going process in which most Member States already have made effective progress;
- *Providing better access to life-long learning*; however, training of their own employees is by economic logic the primary responsibility of employers;
- *Adapting work places to a more diverse workforce*; for the disabled, this could be hard to incentivise especially for small companies where costs of adapting workplaces are likely larger related to turnover;
- *Developing employment opportunities for older workers, including through incentives*; however, the design of employment incentives is crucial to its effectiveness.

Further suggestions from this study to improve the functioning of the labour market for older workers include:

- Reduction of maximum unemployment benefit durations, especially if duration is currently related to age or the number of contribution years;
- A social dialogue between government and social partners on the reduction of age-dependency of wage levels, especially for newly hired older workers.

The following is relevant with respect to aspects of the promotion of business creation and self-employment, with quotes from the Annual Growth Survey in italics:

- *Improving the quality of support systems for business creation and self-employment*; part of this can be achieved by reducing administrative requirements; business appreciation and the provision of business loans requires specific expertise that needs to be built or hired;
- *Promoting entrepreneurial skills*; acquisition skills (skills to win work) and accounting principles have been mentioned as primary skills in qualitative evaluations;
- Expansion of start-up incentives is advisable in countries where this measure virtually does not exist, rather than in countries that already devote many resources to this measure;
- When promoting self-employment, social protection of self-employed should also be considered in order to cover risks of old age and disability in general as well as unemployment if a self-employed worker has an apparent employment relationship with one company.

6.6 Supporting employment especially of young people

Our study confirms that segmentation of the labour market increases the risk of social exclusion of vulnerable groups and the low level of employment protection of young workers. A structural way to achieve this is by:

- Reducing legal differences between temporary and permanent contracts.

The Commission advocates a comprehensive approach to “target in particular young people who are not in employment, education or training”. This study points out that it should be taken into account that:

- Requirements and targets are not necessarily effective if different actors are involved, as each actor may cede the responsibility to activate hard-to-place workers to others;
- The actor investing in activation of hard-to-place (young) workers should be rewarded for successful activation.

With regard to the recommendation in the Annual Growth Survey to promote quality apprenticeships and traineeship contracts, and engage social partners in this, this study confirms that:

- These measures ensure the focus on skills needed in the labour market;
- These measures improve the recognition of trained skills by (other) employers;
- Employment protection may increase job stability and the willingness of employers to invest in training.

The Commission also recommends that particular attention is given to obtaining work experience. It is likely that Member States that focus on increasing youth unemployment increase or introduce employment incentives for work experience places. This comes at the risk of less job search for regular jobs. Therefore, it is advisable to ensure that this measure is discontinued when the economy improves again.

6.7 Protecting the vulnerable

For countries with ungenerous social protection, structural extensions of coverage and eligibility are advisable. Extensions in response to the crisis should not be withdrawn. To achieve a more universal approach to social protection, options include:

- Coverage based on “apparent employment relationship” or “assimilated workers” rather than on specific forms of employment contracts;
- More generous social assistance with strict job search and acceptance criteria.

The following is recommended with regard to social inclusion strategies for vulnerable groups:

- Active measures in general; to be applied from the start of unemployment for vulnerable groups whose employment prospects are low and decrease from the start;
- Rehabilitation; choose between a more cost-effective voluntary approach or a wider reaching but likely not cost-effective compulsory approach;
- Employment incentives are specifically appropriate for vulnerable groups; for purposes of cost-effectiveness it is recommended to focus on the long-term unemployed among these groups;
- Direct jobs and sheltered work can offer meaningful activities for vulnerable groups but come with high costs of prolonged wages and loss of high-productive work of those who would have found a regular job otherwise.

6.8 Improving effectiveness of measures and funding

Recommendations to improve effectiveness of measures and funding are:

- Raise tax or contribution rates sufficiently in advance, either to build up funds or to reduce government debts;
- Address potential risks associated with the combination of central funding and local implementation to avoid parking of non-vulnerable groups in such programmes; possible solutions include strictly capped budgets per municipality, or result-based funding (e.g., 50 per cent pre-financed and 50 per cent conditional on re-employment);
- If different actors are involved in the implementation, award a bonus to the actor investing in a measure for re-employment, even if another actor realizes the final job placement;
- Build in flexible arrangements to facilitate budget shifts if needed, e.g., to second staff from active to passive measures within or between organizations, or to closely monitor expenditures to start up fewer programmes in anticipation of budget shortages;
- If budgets are cut and the effectiveness of individual programmes is unknown, start fewer of the costliest measures to assist larger numbers of unemployed with the available budget;
- Reduce the use of benefits by persons with an informal job, by offering a public sector job at the minimum wage in order to terminate the benefit if the job is refused, rather than increase monitoring or employment incentives;
- Make continuation of measures contingent on evaluation results.

6.9 Improving the quality of evaluations

Whilst current knowledge allows conclusions on broad policy directions, too little is known about the effectiveness of measures for fine-tuning the design. It is important to design labour market measures in such a way that policy makers can learn from them. To further this, the following considerations are given:

- Include ex ante evaluations of policy proposals;
- Start with experiments in selected regions to compare results with other regions as a control group,²⁰¹
- If it is difficult to choose between two policy options, experiment with both options in different regions;
- Study evaluations of experiments in the US, even though results from the US do not necessarily apply to the EU because of institutional differences;
- Evaluation studies of passive measures should use net household income rather than gross replacement rates as the relevant income;
- Evaluation studies of active measures should distinguish between the initial and long-term effect of a measure, the former being the negative lock-in effect and the latter the intended positive effect;
- Evaluation studies of active measures should attempt to estimate deadweight loss, substitution and displacement effects, e.g., for deadweight loss by directly asking in a survey whether the job would be found / the person would be hired without the subsidy, and for substitution by analysing dismissals and hiring at the company level; however, displacement effects are virtually impossible to identify because they are an equilibrium effect.

²⁰¹ For discussions of social experiments, see e.g. <http://www.urban.org/pubs/digest/introduction.html> and http://www.evidencebasedpolicy.org/docs/Orr-Basic_Concepts_of_Social_Experiments.pdf.

6.9.1 *Top priorities*

Within the scope of labour market policies, this study indicates the following top priorities to achieve the EU2010 social and employment goals:

- Broaden coverage and eligibility of social insurance;
- Extend job search and acceptance requirements to other benefits;
- Ensure training is oriented on the labour market;
- Reduce legal differences between temporary and permanent contracts;
- Include ex ante assessments of new policies.

Annex A – Literature list chapters 1-3 and 5

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Annex B - Rationales in LMP database

The source of the tables in this Annex are the aims of measures in the EU labour market policy database, which is based on the contributions of national experts to the database.

Table B.6.1 Aim of various out-of-work income support measures by country

	AT	BE	BU	CY	CZ	DE	DK	EE	ES	FI	FR	GR	HU	IE	IT	LT	LU	LV	MT	NL	PL	PT	RO	SE	SI	SK	UK	
Earnings replacement																												
Income support																												
Insolvency of employer																												
Minimum income scheme																												
Short-time work																												
Part-time work																												
Seasonal																												
ALMP participation																												

Table B.6.2 Aim of various early retirement measures by country

	AT	BE	BU	CY	CZ	DE	DK	EE	ES	FI	FR	GR	HU	IE	IT	LT	LU	LV	MT	NL	PL	PT	RO	SE	SI	SK	UK	
Income support unemployed																												
Id. after restructuring																												
Id. Long-term unemployed																												
Transition to part-time work																												
Transition to flex job																												
Replacement with unemployed																												

	AT	BE	BU	CY	CZ	DE	DK	EE	ES	FI	FR	GR	HU	IE	IT	LT	LU	LV	MT	NL	PL	PT	RO	SE	SI	SK	UK	
tertiary graduates																												
To improve prospects of integration																												
Training to get used to work life																												
Language training immigrants																												
Lifelong learning of employees																												

Table B.6.5 Aim of various employment incentives by country

	AT	BE	BU	CY	CZ	DE	DK	EE	ES	FI	FR	GR	HU	IE	IT	LT	LU	LV	MT	NL	PL	PT	RO	SE	SI	SK	UK	
Regional mobility																												
Re-integrate unemployed																												
Re-integrate disadvantaged groups																												
Re-integrate long-term unemployed																												
Re-integrate older unemployed																												
Integrate young unemployed																												
Integrate tertiary graduates																												
Re-integrate disabled																												
Re-integrate women re-entrants																												
Re-integrate women to flexible jobs																												
Re-integrate to part-time jobs																												
Re-integrate to lower-paid jobs																												
Integrate immigrants																												
Work experience temporary jobs																												
Transportation to work																												

Table B.6.6 Aim of various supported work and rehabilitation measures by country

	AT	BE	BU	CY	CZ	DE	DK	EE	ES	FI	FR	GR	HU	IE	IT	LT	LU	LV	MT	NL	PL	PT	RO	SE	SI	SK	UK
Sheltered/adapted work																											
Centre to prepare disabled for work																											
Security of employment																											
Flexible work environment																											
Mixed support measures																											
Equal opportunities by training																											
Support by job coach																											
Compensate workplace adjustment																											
Integration via lower wage costs																											
Integration via recruitment bonus																											

Annex C – Expenditure tables

Table C.1 Austria: Expenditures on labour market policy measures as a % of GDP

Year	0. LMP Total	1. PES and administration	2. Training	3. Job rotation and job sharing	4. Employment incentives	5. Supported employment rehabilitation	6. Direct job creation	7. Start-up incentives	8. Out-of-work income support	9. Early retirement
1985	1,2%	0,1%	0,1%	0,0%	0,0%	0,0%	0,0%	0,0%	0,8%	0,2%
1986	1,3%	0,1%	0,1%	0,0%	0,0%	0,0%	0,0%	0,0%	0,8%	0,2%
1987	1,4%	0,1%	0,1%	0,0%	0,0%	0,0%	0,0%	0,0%	0,9%	0,2%
1988	1,3%	0,1%	0,1%	0,0%	0,0%	0,0%	0,0%	0,0%	0,8%	0,2%
1989	1,2%	0,1%	0,1%	0,0%	0,0%	0,0%	0,0%	0,0%	0,7%	0,2%
1990	1,2%	0,1%	0,1%	0,0%	0,0%	0,0%	0,0%	0,0%	0,8%	0,1%
1991	1,3%	0,1%	0,1%	0,0%	0,0%	0,0%	0,0%	0,0%	0,9%	0,1%
1992	1,4%	0,1%	0,1%	0,0%	0,0%	0,0%	0,0%	0,0%	1,0%	0,1%
1993	1,7%	0,1%	0,1%	0,0%	0,1%	0,0%	0,0%	0,0%	1,3%	0,1%
1994	1,8%	0,1%	0,1%	0,0%	0,0%	0,0%	0,0%	0,0%	1,3%	0,2%
1995	1,8%	0,1%	0,1%	0,0%	0,0%	0,0%	0,0%	0,0%	1,3%	0,2%
1996	1,8%	0,1%	0,2%	0,0%	0,0%	0,0%	0,0%	0,0%	1,3%	0,2%
1997	1,9%	0,1%	0,2%	0,0%	0,0%	0,0%	0,0%	0,0%	1,4%	0,1%
1998	1,9%	0,1%	0,2%	0,0%	0,0%	0,0%	0,0%	0,0%	1,4%	0,1%
1999	1,9%	0,1%	0,3%	0,0%	0,1%	0,0%	0,0%	0,0%	1,3%	0,1%
2000	1,7%	0,1%	0,3%	0,0%	0,1%	0,0%	0,0%	0,0%	1,1%	0,1%
2001	1,8%	0,2%	0,3%	0,0%	0,1%	0,0%	0,0%	0,0%	1,1%	0,1%
2002	1,8%	0,2%	0,3%	0,0%	0,1%	0,0%	0,0%	0,0%	1,1%	0,2%
2003	2,0%	0,2%	0,3%	0,0%	0,1%	0,0%	0,0%	0,0%	1,1%	0,3%
2004	2,0%	0,2%	0,3%	0,0%	0,1%	0,0%	0,0%	0,0%	1,1%	0,3%
2005	2,1%	0,2%	0,3%	0,0%	0,1%	0,0%	0,0%	0,0%	1,2%	0,3%
2006	2,1%	0,2%	0,4%	0,0%	0,1%	0,0%	0,0%	0,0%	1,1%	0,3%
2007	1,9%	0,2%	0,4%	0,0%	0,1%	0,0%	0,0%	0,0%	1,0%	0,2%
2008	1,8%	0,2%	0,4%	0,0%	0,1%	0,0%	0,0%	0,0%	1,0%	0,2%
2009	2,3%	0,2%	0,5%	0,0%	0,1%	0,0%	0,1%	0,0%	1,3%	0,2%

Table C.2 Belgium: Expenditures on labour market policy measures as a % of GDP

Year	0. LMP Total	1. PES and administration	2. Training	3. Job rotation and job sharing	4. Employment incentives	5. Supported employment rehabilitation	6. Direct job creation	7. Start-up incentives	8. Out-of-work income support	9. Early retirement
1985	4.5%	0.1%	0.1%	0.0%	0.0%	0.1%	0.8%	0.0%	1.9%	1.4%
1986	4.5%	0.1%	0.1%	0.0%	0.0%	0.1%	0.8%	0.0%	1.8%	1.4%
1987	4.4%	0.1%	0.1%	0.0%	0.0%	0.1%	0.7%	0.0%	1.8%	1.4%
1988	4.1%	0.1%	0.2%	0.1%	0.0%	0.2%	0.6%	0.0%	1.6%	1.3%
1989	3.8%	0.1%	0.1%	0.1%	0.0%	0.1%	0.6%	0.0%	1.5%	1.2%
1990	3.7%	0.1%	0.1%	0.1%	0.0%	0.1%	0.5%	0.0%	1.4%	1.2%
1991	3.8%	0.1%	0.1%	0.1%	0.0%	0.1%	0.5%	0.0%	1.5%	1.2%
1992	3.9%	0.2%	0.1%	0.1%	0.0%	0.1%	0.5%	0.0%	1.7%	1.2%
1993	4.1%	0.2%	0.2%	0.1%	0.0%	0.1%	0.5%	0.0%	1.9%	1.2%
1994	4.1%	0.2%	0.2%	0.1%	0.1%	0.1%	0.5%	0.0%	1.8%	1.1%
1995	3.9%	0.2%	0.2%	0.1%	0.1%	0.1%	0.5%	0.0%	1.7%	1.0%
1996	4.0%	0.2%	0.2%	0.1%	0.3%	0.1%	0.5%	0.0%	1.7%	1.1%
1997	3.8%	0.2%	0.2%	0.1%	0.1%	0.1%	0.4%	0.0%	1.6%	1.1%
1998	3.7%	0.2%	0.2%	0.1%	0.2%	0.1%	0.5%	0.0%	1.5%	1.0%
1999	3.5%	0.2%	0.2%	0.1%	0.1%	0.1%	0.5%	0.0%	1.4%	1.0%
2000	3.2%	0.2%	0.2%	0.1%	0.1%	0.1%	0.5%	0.0%	1.1%	1.0%
2001	3.3%	0.2%	0.2%	0.1%	0.1%	0.1%	0.4%	0.0%	1.2%	1.0%
2002	3.3%	0.2%	0.2%	0.0%	0.1%	0.1%	0.4%	0.0%	1.4%	1.0%
2003	3.5%	0.2%	0.2%	0.0%	0.2%	0.1%	0.4%	0.0%	1.5%	0.9%
2004	3.5%	0.2%	0.2%	0.0%	0.2%	0.1%	0.4%	0.0%	1.5%	0.9%
2005	3.5%	0.2%	0.2%	0.0%	0.2%	0.1%	0.3%	0.0%	1.5%	0.8%
2006	3.3%	0.2%	0.2%	0.0%	0.3%	0.1%	0.4%	0.0%	1.4%	0.8%
2007	3.2%	0.2%	0.2%	0.0%	0.4%	0.1%	0.3%	0.0%	1.3%	0.7%
2008	3.3%	0.2%	0.2%	0.0%	0.5%	0.1%	0.3%	0.0%	1.3%	0.7%
2009	3.7%	0.2%	0.1%	0.0%	0.5%	0.1%	0.4%	0.0%	1.6%	0.8%

Table C.3 Bulgaria: Expenditures on labour market policy measures as a % of GDP

Year	0. LMP Total	1. PES and administration	2. Training	3. Job rotation and job sharing	4. Employment incentives	5. Supported employment rehabilitation	6. Direct job creation	7. Start-up incentives	8. Out-of-work income support	9. Early retirement
1985	.	.	.	.	.	.	.	.	.	.
1986	.	.	.	.	.	.	.	.	.	.
1987	.	.	.	.	.	.	.	.	.	.
1988	.	.	.	.	.	.	.	.	.	.
1989	.	.	.	.	.	.	.	.	.	.
1990	.	.	.	.	.	.	.	.	.	.
1991	.	.	.	.	.	.	.	.	.	.
1992	.	.	.	.	.	.	.	.	.	.
1993	.	.	.	.	.	.	.	.	.	.
1994	.	.	.	.	.	.	.	.	.	.
1995	.	.	.	.	.	.	.	.	.	.
1996	.	.	.	.	.	.	.	.	.	.
1997	.	.	.	.	.	.	.	.	.	.
1998	.	.	.	.	.	.	.	.	.	.
1999	.	.	.	.	.	.	.	.	.	.
2000	.	.	.	.	.	.	.	.	.	.
2001	.	.	.	.	.	.	.	.	.	.
2002	.	.	.	.	.	.	.	.	.	.
2003	.	.	.	.	.	.	.	.	.	.
2004	0.8%	0.1%	0.1%	.	0.0%	0.0%	0.4%	0.0%	0.3%	.
2005	0.7%	0.1%	0.1%	.	0.0%	0.0%	0.3%	0.0%	0.2%	.
2006	0.6%	0.1%	0.0%	.	0.0%	0.0%	0.3%	0.0%	0.2%	.
2007	0.5%	0.1%	0.0%	.	0.0%	0.0%	0.2%	0.0%	0.1%	.
2008	0.5%	0.1%	0.0%	.	0.0%	0.0%	0.2%	0.0%	0.2%	.
2009	0.7%	0.0%	0.0%	.	0.0%	0.0%	0.2%	0.0%	0.4%	.

Table C.4 Cyprus: Expenditures on labour market policy measures as a % of GDP

Year	0. LMP Total	1. PES and administration	2. Training	3. Job rotation and job sharing	4. Employment incentives	5. Supported employment rehabilitation	6. Direct job creation	7. Start-up incentives	8. Out-of-work income support	9. Early retirement
1985
1986
1987
1988
1989
1990
1991
1992
1993
1994
1995
1996
1997
1998
1999
2000	0.4%	.	.
2001
2002
2003
2004
2005
2006	0.7%	0.0%	0.0%	.	0.0%	0.0%	.	0.0%	0.7%	.
2007	0.6%	0.0%	0.0%	.	0.1%	0.0%	.	0.0%	0.5%	.
2008	0.5%	0.0%	0.0%	.	0.0%	0.0%	.	0.0%	0.4%	.
2009	0.7%	0.0%	0.0%	.	0.0%	0.0%	.	0.0%	0.6%	.

Table C.5 Czech Republic: Expenditures on labour market policy measures as a % of GDP

Year	0. LMP Total	1. PES and administration	2. Training	3. Job rotation and job sharing	4. Employment incentives	5. Supported employment rehabilitation	6. Direct job creation	7. Start-up incentives	8. Out-of-work income support	9. Early retirement
1985	.	.	.	.	.	.	.	.	.	.
1986	.	.	.	.	.	.	.	.	.	.
1987	.	.	.	.	.	.	.	.	.	.
1988	.	.	.	.	.	.	.	.	.	.
1989	.	.	.	.	.	.	.	.	.	.
1990	.	.	.	.	.	.	.	.	.	.
1991	0.4%	0.1%	0.0%	.	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%
1992	0.4%	0.1%	0.0%	.	0.1%	0.0%	0.0%	0.0%	0.2%	0.0%
1993	0.3%	0.1%	0.0%	.	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%
1994	0.3%	0.1%	0.0%	.	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%
1995	0.3%	0.1%	0.0%	.	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%
1996	0.2%	0.1%	0.0%	.	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%
1997	0.3%	0.1%	0.0%	.	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%
1998	0.3%	0.1%	0.0%	.	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%
1999	0.5%	0.1%	0.0%	.	0.0%	0.0%	0.0%	0.0%	0.3%	0.0%
2000	0.5%	0.1%	0.0%	.	0.1%	0.0%	0.0%	0.0%	0.3%	0.0%
2001	0.4%	0.1%	0.0%	.	0.1%	0.0%	0.0%	0.0%	0.2%	0.0%
2002	0.5%	0.1%	0.0%	.	0.0%	0.0%	0.0%	0.0%	0.3%	0.0%
2003	0.5%	0.1%	0.0%	.	0.0%	0.0%	0.0%	0.0%	0.3%	0.0%
2004	0.5%	0.1%	0.0%	.	0.0%	0.0%	0.0%	0.0%	0.3%	0.0%
2005	0.5%	0.1%	0.0%	.	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%
2006	0.5%	0.1%	0.0%	.	0.0%	0.1%	0.0%	0.0%	0.2%	0.0%
2007	0.5%	0.1%	0.0%	.	0.0%	0.1%	0.0%	0.0%	0.2%	0.0%
2008	0.4%	0.1%	0.0%	.	0.0%	0.1%	0.0%	0.0%	0.2%	0.0%
2009	0.7%	0.1%	0.0%	.	0.0%	0.1%	0.0%	0.0%	0.4%	0.0%

Table C.6 Germany: Expenditures on labour market policy measures as a % of GDP

Year	0. LMP Total	1. PES and administration	2. Training	3. Job rotation and job sharing	4. Employment incentives	5. Supported employment rehabilitation	6. Direct job creation	7. Start-up incentives	8. Out-of-work income support	9. Early retirement
1985	2.0%	0.2%	0.2%	0.0%	0.0%	0.1%	0.1%	0.0%	1.4%	0.0%
1986	2.0%	0.2%	0.3%	0.0%	0.0%	0.1%	0.1%	0.0%	1.3%	0.0%
1987	2.2%	0.2%	0.3%	0.0%	0.0%	0.1%	0.2%	0.0%	1.3%	0.0%
1988	2.2%	0.2%	0.3%	0.0%	0.1%	0.1%	0.2%	0.0%	1.3%	0.0%
1989	2.0%	0.2%	0.3%	0.0%	0.0%	0.1%	0.1%	0.0%	1.2%	0.0%
1990	2.0%	0.2%	0.4%	0.0%	0.1%	0.1%	0.1%	0.0%	1.1%	0.0%
1991	2.9%	0.2%	0.5%	0.0%	0.0%	0.1%	0.3%	0.0%	1.5%	0.3%
1992	3.4%	0.2%	0.7%	0.0%	0.0%	0.1%	0.4%	0.0%	1.5%	0.5%
1993	3.9%	0.2%	0.6%	0.0%	0.1%	0.1%	0.4%	0.0%	1.9%	0.6%
1994	3.6%	0.2%	0.5%	0.0%	0.0%	0.1%	0.3%	0.0%	2.0%	0.5%
1995	3.5%	0.2%	0.5%	0.0%	0.1%	0.1%	0.3%	0.0%	2.0%	0.3%
1996	3.8%	0.2%	0.6%	0.0%	0.1%	0.1%	0.3%	0.0%	2.3%	0.1%
1997	3.6%	0.2%	0.5%	0.0%	0.1%	0.1%	0.2%	0.0%	2.4%	0.1%
1998	3.4%	0.2%	0.5%	0.0%	0.1%	0.1%	0.3%	0.0%	2.3%	0.0%
1999	3.4%	0.2%	0.5%	0.0%	0.1%	0.1%	0.3%	0.0%	2.1%	0.0%
2000	3.1%	0.2%	0.5%	0.0%	0.1%	0.1%	0.3%	0.0%	1.9%	0.0%
2001	3.1%	0.2%	0.6%	0.0%	0.1%	0.1%	0.2%	0.0%	1.9%	0.0%
2002	3.4%	0.2%	0.6%	0.0%	0.1%	0.1%	0.2%	0.1%	2.1%	0.0%
2003	3.5%	0.2%	0.5%	0.0%	0.1%	0.2%	0.1%	0.1%	2.2%	0.0%
2004	3.4%	0.2%	0.4%	0.0%	0.1%	0.1%	0.1%	0.1%	2.3%	0.0%
2005	2.9%	0.3%	0.3%	0.0%	0.0%	0.1%	0.1%	0.1%	2.0%	0.0%
2006	2.6%	0.3%	0.3%	0.0%	0.1%	0.0%	0.1%	0.1%	1.7%	0.1%
2007	2.0%	0.3%	0.2%	0.0%	0.1%	0.0%	0.1%	0.1%	1.2%	0.1%
2008	1.9%	0.3%	0.3%	0.0%	0.1%	0.0%	0.1%	0.1%	1.0%	0.1%
2009	2.5%	0.4%	0.4%	0.0%	0.1%	0.0%	0.1%	0.0%	1.5%	0.1%

Table C.7 Denmark: Expenditures on labour market policy measures as a % of GDP

Year	0. LMP Total	1. PES and administration	2. Training	3. Job rotation and job sharing	4. Employment incentives	5. Supported employment rehabilitation	6. Direct job creation	7. Start-up incentives	8. Out-of-work income support	9. Early retirement
1985										
1986	4.8%	0.1%	0.4%	0.0%	0.6%	0.1%	0.1%	0.0%	2.9%	0.7%
1987	4.8%	0.1%	0.4%	0.0%	0.5%	0.1%	0.1%	0.0%	2.9%	0.7%
1988	5.2%	0.1%	0.3%	0.0%	0.6%	0.2%	0.1%	0.0%	3.3%	0.6%
1989	5.7%	0.1%	0.3%	0.0%	0.7%	0.2%	0.1%	0.0%	3.7%	0.6%
1990	5.6%	0.1%	0.3%	0.0%	0.6%	0.2%	0.1%	0.1%	3.7%	0.6%
1991	6.1%	0.1%	0.3%	0.0%	0.7%	0.2%	0.0%	0.1%	4.0%	0.6%
1992	6.5%	0.1%	0.4%	0.0%	0.8%	0.3%	0.0%	0.1%	4.2%	0.6%
1993	7.5%	0.1%	0.5%	0.0%	1.0%	0.4%	0.0%	0.1%	4.7%	0.7%
1994	6.8%	0.1%	0.5%	0.0%	0.9%	0.3%	0.0%	0.1%	4.3%	0.6%
1995	6.2%	0.1%	0.7%	0.0%	0.7%	0.3%	0.0%	0.1%	3.4%	0.8%
1996	5.7%	0.1%	0.8%	0.0%	0.5%	0.2%	0.0%	0.1%	2.8%	1.0%
1997	5.2%	0.1%	0.7%	0.0%	0.5%	0.2%	0.2%	0.1%	2.4%	1.0%
1998	4.7%	0.1%	0.7%	0.0%	0.5%	0.3%	0.2%	0.0%	2.0%	0.9%
1999	4.6%	0.1%	0.8%	0.0%	0.5%	0.4%	0.1%	0.0%	1.7%	0.8%
2000	4.2%	0.1%	0.8%	0.0%	0.5%	0.4%	0.1%	0.0%	1.6%	0.8%
2001	4.1%	0.1%	0.7%	0.0%	0.5%	0.4%	0.0%	0.0%	1.5%	0.8%
2002	4.1%	0.1%	0.7%	0.0%	0.5%	0.5%	0.0%	0.0%	1.6%	0.8%
2003	4.4%	0.1%	0.6%	0.0%	0.5%	0.5%	0.0%	0.0%	1.9%	0.8%
2004	4.3%	0.2%	0.5%	0.0%	0.5%	0.5%	0.0%	0.0%	1.9%	0.7%
2005	3.8%	0.2%	0.5%	0.0%	0.3%	0.5%	0.0%	0.0%	1.7%	0.7%
2006	3.2%	0.2%	0.4%	0.0%	0.2%	0.6%	0.0%	0.0%	1.3%	0.5%
2007	2.6%	0.1%	0.3%	0.0%	0.1%	0.6%	0.0%	0.0%	1.0%	0.5%
2008	2.4%	0.2%	0.2%	0.0%	0.1%	0.6%	0.0%	0.0%	0.7%	0.4%
2009	2.5%	0.2%	0.2%	0.0%	0.1%	0.6%	0.0%	0.0%	0.8%	0.5%

Table C.8 Estonia: Expenditures on labour market policy measures as a % of GDP

Year	0. LMP Total	1. PES and administration	2. Training	3. Job rotation and job sharing	4. Employment incentives	5. Supported employment rehabilitation	6. Direct job creation	7. Start-up incentives	8. Out-of-work income support	9. Early retirement
1985	.	.	.	.	.	.	.	.	.	.
1986	.	.	.	.	.	.	.	.	.	.
1987	.	.	.	.	.	.	.	.	.	.
1988	.	.	.	.	.	.	.	.	.	.
1989	.	.	.	.	.	.	.	.	.	.
1990	.	.	.	.	.	.	.	.	.	.
1991	.	.	.	.	.	.	.	.	.	.
1992	.	.	.	.	.	.	.	.	.	.
1993	.	.	.	.	.	.	.	.	.	.
1994	.	.	.	.	.	.	.	.	.	.
1995	.	.	.	.	.	.	.	.	.	.
1996	.	.	.	.	.	.	.	.	.	.
1997	.	.	.	.	.	.	.	.	.	.
1998	.	.	.	.	.	.	.	.	.	.
1999	.	.	.	.	.	.	.	.	.	.
2000	0.3%	0.0%	0.0%	.	0.0%	0.0%	0.0%	0.0%	0.2%	.
2001	0.3%	0.0%	0.0%	.	0.0%	0.0%	.	0.0%	0.2%	.
2002	0.3%	0.0%	0.0%	.	0.0%	0.0%	.	0.0%	0.2%	.
2003	0.3%	0.0%	0.0%	.	0.0%	0.0%	0.0%	0.0%	0.2%	.
2004	0.2%	0.0%	0.0%	.	0.0%	0.0%	0.0%	0.0%	0.2%	.
2005	0.2%	0.0%	0.0%	.	0.0%	0.0%	0.0%	0.0%	0.1%	.
2006	0.2%	0.0%	0.0%	.	0.0%	0.0%	0.0%	0.0%	0.1%	.
2007	0.1%	0.0%	0.0%	.	0.0%	0.0%	0.0%	0.0%	0.1%	.
2008	0.3%	0.0%	0.0%	.	0.0%	0.0%	0.0%	0.0%	0.2%	.
2009	1.5%	0.1%	0.1%	.	0.0%	0.0%	0.0%	0.0%	1.3%	.

Table C.9 Spain: Expenditures on labour market policy measures as a % of GDP

Year	0. LMP Total	1. PES and administration	2. Training	3. Job rotation and job sharing	4. Employment incentives	5. Supported employment rehabilitation	6. Direct job creation	7. Start-up incentives	8. Out-of-work income support	9. Early retirement
1985	3.2%	0.1%	0.0%	0.0%	0.1%	0.0%	0.1%	0.0%	2.9%	0.0%
1986	3.2%	0.1%	0.1%	0.0%	0.2%	0.0%	0.1%	0.2%	2.6%	0.0%
1987	3.2%	0.1%	0.1%	0.0%	0.1%	0.0%	0.1%	0.2%	2.5%	0.0%
1988	3.2%	0.1%	0.2%	0.0%	0.1%	0.0%	0.1%	0.2%	2.4%	0.0%
1989	3.1%	0.1%	0.2%	0.0%	0.1%	0.0%	0.1%	0.2%	2.2%	0.0%
1990	3.4%	0.1%	0.2%	0.0%	0.1%	0.0%	0.1%	0.2%	2.6%	0.0%
1991	3.6%	0.1%	0.2%	0.0%	0.1%	0.0%	0.1%	0.2%	2.9%	0.0%
1992	3.9%	0.1%	0.2%	0.0%	0.2%	0.0%	0.0%	0.1%	3.2%	0.0%
1993	4.0%	0.1%	0.1%	0.0%	0.1%	0.0%	0.1%	0.0%	3.5%	0.0%
1994	3.6%	0.1%	0.1%	0.0%	0.1%	0.0%	0.0%	0.0%	3.1%	0.0%
1995	2.8%	0.1%	0.1%	0.0%	0.1%	0.0%	0.1%	0.0%	2.4%	0.0%
1996	2.5%	0.1%	0.1%	0.0%	0.1%	0.0%	0.0%	0.0%	2.1%	0.0%
1997	2.2%	0.1%	0.1%	0.0%	0.1%	0.0%	0.1%	0.0%	1.8%	0.0%
1998	2.2%	0.1%	0.2%	0.0%	0.2%	0.0%	0.1%	0.0%	1.6%	0.0%
1999	2.2%	0.1%	0.2%	0.0%	0.3%	0.0%	0.1%	0.0%	1.4%	0.0%
2000	2.1%	0.1%	0.2%	0.0%	0.3%	0.0%	0.1%	0.0%	1.3%	0.0%
2001	2.1%	0.1%	0.1%	0.0%	0.3%	0.0%	0.1%	0.0%	1.3%	0.0%
2002	2.1%	0.1%	0.1%	0.0%	0.3%	0.0%	0.1%	0.0%	1.5%	0.0%
2003	2.1%	0.1%	0.1%	0.0%	0.3%	0.0%	0.1%	0.0%	1.4%	0.0%
2004	2.1%	0.1%	0.1%	0.0%	0.3%	0.0%	0.1%	0.0%	1.5%	0.0%
2005	2.1%	0.1%	0.1%	0.0%	0.3%	0.0%	0.1%	0.1%	1.4%	0.0%
2006	2.1%	0.1%	0.1%	0.0%	0.3%	0.0%	0.1%	0.1%	1.4%	0.0%
2007	2.2%	0.1%	0.1%	0.0%	0.3%	0.0%	0.1%	0.1%	1.4%	0.0%
2008	2.6%	0.1%	0.1%	0.0%	0.3%	0.0%	0.1%	0.1%	1.8%	0.0%
2009	3.7%	0.1%	0.2%	0.0%	0.3%	0.0%	0.1%	0.1%	2.9%	0.0%

Table C.10 Finland: Expenditures on labour market policy measures as a % of GDP

Year	0. LMP Total	1. PES and administration	2. Training	3. Job rotation and job sharing	4. Employment incentives	5. Supported employment rehabilitation	6. Direct job creation	7. Start-up incentives	8. Out-of-work income support	9. Early retirement
1985	2.0%	0.1%	0.3%	0.0%	0.0%	0.1%	0.2%	0.0%	0.8%	0.5%
1986	2.2%	0.1%	0.3%	0.0%	0.0%	0.1%	0.2%	0.0%	0.9%	0.6%
1987	2.2%	0.1%	0.3%	0.0%	0.0%	0.1%	0.3%	0.0%	0.9%	0.6%
1988	2.2%	0.1%	0.3%	0.0%	0.0%	0.1%	0.4%	0.0%	0.8%	0.6%
1989	1.9%	0.1%	0.2%	0.0%	0.0%	0.1%	0.3%	0.0%	0.6%	0.5%
1990	1.9%	0.1%	0.3%	0.0%	0.0%	0.1%	0.3%	0.0%	0.6%	0.5%
1991	3.3%	0.1%	0.3%	0.0%	0.0%	0.1%	0.5%	0.0%	1.7%	0.5%
1992	5.2%	0.1%	0.5%	0.0%	0.1%	0.1%	0.7%	0.0%	3.3%	0.5%
1993	6.2%	0.1%	0.5%	0.0%	0.1%	0.1%	0.5%	0.1%	4.3%	0.5%
1994	5.9%	0.1%	0.5%	0.0%	0.1%	0.1%	0.5%	0.1%	4.1%	0.5%
1995	5.1%	0.1%	0.5%	0.0%	0.1%	0.1%	0.5%	0.0%	3.4%	0.4%
1996	5.0%	0.1%	0.7%	0.0%	0.0%	0.1%	0.5%	0.0%	3.2%	0.4%
1997	4.4%	0.1%	0.6%	0.1%	0.0%	0.1%	0.4%	0.0%	2.7%	0.4%
1998	3.7%	0.1%	0.5%	0.1%	0.1%	0.1%	0.3%	0.0%	2.1%	0.4%
1999	3.4%	0.1%	0.5%	0.1%	0.1%	0.1%	0.2%	0.0%	1.9%	0.5%
2000	2.9%	0.1%	0.4%	0.1%	0.1%	0.1%	0.1%	0.0%	1.6%	0.5%
2001	2.8%	0.1%	0.3%	0.1%	0.1%	0.1%	0.1%	0.0%	1.5%	0.5%
2002	2.8%	0.1%	0.3%	0.0%	0.1%	0.1%	0.1%	0.0%	1.5%	0.5%
2003	2.9%	0.1%	0.4%	0.1%	0.1%	0.1%	0.1%	0.0%	1.6%	0.5%
2004	3.0%	0.1%	0.4%	0.0%	0.1%	0.1%	0.1%	0.0%	1.6%	0.5%
2005	2.8%	0.1%	0.4%	0.0%	0.1%	0.1%	0.1%	0.0%	1.5%	0.4%
2006	2.6%	0.1%	0.4%	0.1%	0.1%	0.1%	0.1%	0.0%	1.3%	0.4%
2007	2.3%	0.1%	0.4%	0.1%	0.1%	0.1%	0.1%	0.0%	1.0%	0.4%
2008	2.1%	0.1%	0.4%	0.1%	0.1%	0.1%	0.1%	0.0%	1.0%	0.4%
2009	2.8%	0.1%	0.4%	0.1%	0.1%	0.1%	0.1%	0.0%	1.5%	0.4%

Table C.11 France: Expenditures on labour market policy measures as a % of GDP

Year	0. LMP Total	1. PES and administration	2. Training	3. Job rotation and job sharing	4. Employment incentives	5. Supported employment rehabilitation	6. Direct job creation	7. Start-up incentives	8. Out-of-work income support	9. Early retirement
1985	2.1%	0.1%	0.3%	.	0.0%	0.0%	0.0%	0.0%	1.1%	0.4%
1986	2.1%	0.1%	0.3%	.	0.0%	0.0%	0.1%	0.0%	1.1%	0.4%
1987	2.2%	0.1%	0.3%	.	0.1%	0.1%	0.1%	0.0%	1.2%	0.3%
1988	2.2%	0.1%	0.4%	.	0.0%	0.0%	0.1%	0.0%	1.2%	0.3%
1989	2.0%	0.1%	0.3%	.	0.0%	0.0%	0.0%	0.0%	1.1%	0.2%
1990	2.1%	0.1%	0.4%	.	0.1%	0.0%	0.1%	0.0%	1.2%	0.2%
1991	2.3%	0.1%	0.4%	.	0.1%	0.0%	0.1%	0.0%	1.3%	0.2%
1992	2.6%	0.1%	0.4%	.	0.1%	0.1%	0.2%	0.0%	1.4%	0.2%
1993	2.9%	0.2%	0.5%	.	0.2%	0.1%	0.3%	0.0%	1.5%	0.2%
1994	2.8%	0.2%	0.5%	.	0.2%	0.1%	0.3%	0.0%	1.4%	0.2%
1995	2.7%	0.1%	0.4%	.	0.2%	0.1%	0.3%	0.0%	1.3%	0.2%
1996	2.7%	0.1%	0.4%	.	0.2%	0.1%	0.3%	0.0%	1.3%	0.2%
1997	2.8%	0.2%	0.5%	.	0.3%	0.1%	0.2%	0.0%	1.3%	0.3%
1998	2.7%	0.2%	0.4%	.	0.2%	0.1%	0.3%	0.0%	1.3%	0.2%
1999	2.7%	0.2%	0.4%	.	0.2%	0.1%	0.4%	0.0%	1.3%	0.2%
2000	2.6%	0.2%	0.4%	.	0.2%	0.1%	0.4%	0.0%	1.2%	0.2%
2001	2.6%	0.2%	0.3%	.	0.2%	0.1%	0.4%	0.0%	1.2%	0.2%
2002	2.7%	0.2%	0.3%	.	0.1%	0.1%	0.4%	0.0%	1.4%	0.1%
2003	2.8%	0.2%	0.3%	.	0.1%	0.1%	0.3%	0.0%	1.6%	0.1%
2004	2.7%	0.2%	0.3%	.	0.1%	0.1%	0.2%	0.0%	1.6%	0.1%
2005	2.5%	0.2%	0.3%	.	0.1%	0.1%	0.2%	0.0%	1.5%	0.1%
2006	2.3%	0.2%	0.3%	.	0.1%	0.1%	0.2%	0.0%	1.3%	0.0%
2007	2.2%	0.2%	0.3%	.	0.1%	0.1%	0.2%	0.0%	1.2%	0.0%
2008	2.0%	0.2%	0.3%	.	0.1%	0.1%	0.1%	0.0%	1.1%	0.0%
2009	2.4%	0.3%	0.4%	.	0.1%	0.1%	0.2%	0.0%	1.4%	0.0%

Table C.12 Greece: Expenditures on labour market policy measures as a % of GDP

Year	0. LMP Total	1. PES and administration	2. Training	3. Job rotation and job sharing	4. Employment incentives	5. Supported employment rehabilitation	6. Direct job creation	7. Start-up incentives	8. Out-of-work income support	9. Early retirement
1985	0.5%	0.0%	0.1%	.	0.0%	0.0%	0.0%	0.0%	0.3%	.
1986	0.5%	0.0%	0.1%	.	0.1%	0.0%	0.0%	0.0%	0.4%	.
1987	0.5%	0.0%	0.1%	.	0.1%	0.0%	0.0%	0.0%	0.4%	.
1988	0.5%	0.0%	0.0%	.	0.1%	0.0%	0.0%	0.0%	0.3%	.
1989	0.6%	0.0%	0.1%	.	0.1%	0.0%	0.0%	0.0%	0.4%	.
1990	0.6%	0.0%	0.0%	.	0.1%	0.0%	0.0%	0.0%	0.4%	.
1991	0.7%	0.0%	0.1%	.	0.0%	0.0%	0.0%	0.0%	0.5%	.
1992	0.6%	0.0%	0.1%	.	0.1%	0.0%	0.0%	0.0%	0.4%	.
1993	0.5%	0.1%	0.0%	.	0.1%	0.0%	0.0%	0.0%	0.4%	.
1994	0.6%	0.0%	0.0%	.	0.1%	0.0%	0.0%	0.0%	0.4%	.
1995	0.8%	0.1%	0.3%	.	0.0%	0.0%	0.0%	0.0%	0.4%	.
1996	0.8%	0.1%	0.2%	.	0.1%	0.0%	0.0%	0.0%	0.4%	.
1997	0.8%	0.0%	0.2%	.	0.1%	0.0%	0.0%	0.0%	0.4%	0.0%
1998	0.8%	0.1%	0.2%	.	0.1%	0.0%	0.0%	0.0%	0.4%	0.0%
1999	0.6%	0.0%	0.1%	.	0.1%	0.0%	0.0%	0.0%	0.4%	0.0%
2000	0.6%	0.0%	0.1%	.	0.1%	0.0%	0.0%	0.0%	0.4%	0.0%
2001	0.6%	0.0%	0.0%	.	0.2%	0.0%	0.0%	0.0%	0.4%	0.0%
2002	0.5%	0.0%	0.1%	.	0.1%	0.0%	0.0%	0.0%	0.3%	0.0%
2003	0.5%	0.0%	0.0%	.	0.0%	0.0%	0.0%	0.0%	0.4%	0.0%
2004	0.6%	0.0%	0.0%	.	0.1%	0.0%	0.0%	0.1%	0.4%	0.0%
2005	0.5%	0.0%	0.0%	.	0.0%	0.0%	0.0%	0.0%	0.4%	0.0%
2006	0.5%	0.0%	0.1%	.	0.1%	0.0%	0.0%	0.0%	0.4%	0.0%
2007	0.5%	0.0%	0.1%	.	0.1%	0.0%	0.0%	0.0%	0.3%	0.0%
2008	0.6%	0.0%	0.1%	.	0.0%	0.0%	0.0%	0.0%	0.5%	0.0%
2009	0.9%	0.0%	0.0%	.	0.1%	0.0%	0.0%	0.1%	0.7%	0.0%

Table C.13 Hungary: Expenditures on labour market policy measures as a % of GDP

Year	0. LMP Total	1. PES and administration	2. Training	3. Job rotation and job sharing	4. Employment incentives	5. Supported employment rehabilitation	6. Direct job creation	7. Start-up incentives	8. Out-of-work income support	9. Early retirement
1985	.	.	.	.	.	.	.	.	.	.
1986	.	.	.	.	.	.	.	.	.	.
1987	.	.	.	.	.	.	.	.	.	.
1988	.	.	.	.	.	.	.	.	.	.
1989	.	.	.	.	.	.	.	.	.	.
1990	.	.	.	.	.	.	.	.	.	.
1991	.	.	.	.	.	.	.	.	.	.
1992	2.8%	0.1%	0.2%	.	0.2%	.	0.0%	0.1%	2.2%	.
1993	2.7%	0.1%	0.3%	.	0.2%	.	0.0%	0.0%	2.0%	.
1994	1.7%	0.1%	0.3%	.	0.2%	.	0.0%	0.0%	1.1%	.
1995	1.1%	0.1%	0.2%	.	0.1%	.	0.0%	0.0%	0.7%	.
1996	0.9%	0.1%	0.1%	.	0.1%	.	0.0%	0.0%	0.6%	.
1997	0.9%	0.1%	0.1%	.	0.1%	.	0.1%	0.0%	0.4%	.
1998	0.8%	0.1%	0.1%	.	0.1%	.	0.0%	0.0%	0.4%	.
1999	0.9%	0.1%	0.1%	.	0.1%	.	0.0%	0.0%	0.5%	.
2000	0.8%	0.1%	0.1%	.	0.1%	.	0.1%	0.0%	0.4%	.
2001	0.8%	0.1%	0.1%	.	0.1%	.	0.1%	0.0%	0.4%	.
2002	0.9%	0.1%	0.1%	.	0.1%	.	0.2%	0.0%	0.4%	.
2003	0.7%	0.1%	0.1%	.	0.1%	.	0.1%	0.0%	0.4%	.
2004	0.7%	0.1%	0.0%	.	0.1%	.	0.1%	0.0%	0.4%	.
2005	0.7%	0.1%	0.0%	.	0.1%	.	0.1%	0.0%	0.4%	.
2006	0.6%	0.1%	0.1%	.	0.1%	.	0.0%	0.0%	0.4%	.
2007	0.6%	0.1%	0.1%	.	0.1%	.	0.0%	0.0%	0.4%	.
2008	0.6%	0.1%	0.1%	.	0.1%	.	0.0%	0.0%	0.4%	.
2009	1.0%	0.1%	0.0%	.	0.1%	.	0.2%	0.0%	0.5%	.

Table C.14 Ireland: Expenditures on labour market policy measures as a % of GDP

Year	0. LMP Total	1. PES and administration	2. Training	3. Job rotation and job sharing	4. Employment incentives	5. Supported employment rehabilitation	6. Direct job creation	7. Start-up incentives	8. Out-of-work income support	9. Early retirement
1985	4.4%	0.2%	0.7%	.	0.0%	0.0%	0.1%	0.1%	3.4%	0.0%
1986	4.5%	0.2%	0.7%	.	0.0%	0.0%	0.2%	0.1%	3.4%	0.0%
1987	4.3%	0.2%	0.6%	.	0.0%	0.0%	0.2%	0.0%	3.2%	0.0%
1988	4.1%	0.2%	0.7%	.	0.0%	0.0%	0.2%	0.0%	2.9%	0.0%
1989	3.7%	0.2%	0.6%	.	0.0%	0.0%	0.2%	0.0%	2.6%	0.0%
1990	3.6%	0.2%	0.6%	.	0.0%	0.0%	0.2%	0.0%	2.5%	0.0%
1991	3.8%	0.4%	0.5%	.	0.0%	0.0%	0.2%	0.0%	2.6%	0.1%
1992	4.1%	0.4%	0.5%	.	0.0%	0.0%	0.4%	0.0%	2.7%	0.1%
1993	4.2%	0.3%	0.5%	.	0.0%	0.0%	0.4%	0.0%	2.7%	0.2%
1994	4.3%	0.3%	0.5%	.	0.0%	0.0%	0.5%	0.0%	2.7%	0.2%
1995	4.1%	0.3%	0.4%	.	0.1%	0.0%	0.6%	0.0%	2.5%	0.1%
1996	3.7%	0.3%	0.4%	.	0.1%	0.0%	0.6%	0.0%	2.2%	0.1%
1997	3.1%	0.2%	0.3%	.	0.1%	0.0%	0.6%	0.0%	1.7%	0.1%
1998	2.6%	0.2%	0.3%	.	0.1%	0.0%	0.5%	0.1%	1.4%	0.1%
1999	2.2%	0.2%	0.3%	.	0.1%	0.0%	0.4%	0.0%	1.0%	0.1%
2000	1.6%	0.1%	0.2%	.	0.1%	0.0%	0.3%	0.0%	0.7%	0.1%
2001	1.7%	0.2%	0.2%	.	0.1%	0.0%	0.3%	0.0%	0.6%	0.1%
2002	1.7%	0.2%	0.2%	.	0.1%	0.0%	0.3%	0.0%	0.8%	0.1%
2003	1.6%	0.2%	0.2%	.	0.1%	0.0%	0.2%	0.0%	0.8%	0.1%
2004	1.6%	0.2%	0.2%	.	0.1%	0.0%	0.2%	0.0%	0.8%	0.1%
2005	1.5%	0.2%	0.2%	.	0.1%	0.0%	0.2%	0.0%	0.8%	0.1%
2006	1.5%	0.2%	0.2%	.	0.0%	0.0%	0.2%	0.0%	0.8%	0.1%
2007	1.6%	0.2%	0.2%	.	0.0%	0.0%	0.2%	0.0%	0.8%	0.1%
2008	2.1%	0.2%	0.3%	.	0.0%	0.0%	0.2%	0.0%	1.3%	0.1%
2009	3.5%	0.2%	0.3%	.	0.0%	0.0%	0.3%	0.0%	2.6%	0.1%

Table C.15 Italy: Expenditures on labour market policy measures as a % of GDP

Year	0. LMP Total	1. PES and administration	2. Training	3. Job rotation and job sharing	4. Employment incentives	5. Supported employment rehabilitation	6. Direct job creation	7. Start-up incentives	8. Out-of-work income support	9. Early retirement
1985										
1986										
1987										
1988										
1989										
1990	1.2%	0.0%	0.3%	0.0%	0.0%		0.0%	0.0%	0.5%	0.3%
1991	1.2%	0.0%	0.3%	0.0%	0.0%		0.0%	0.0%	0.6%	0.3%
1992	1.3%	0.0%	0.2%	0.0%	0.0%		0.0%	0.0%	0.7%	0.4%
1993	1.4%	0.0%	0.2%	0.0%	0.1%		0.0%	0.0%	0.9%	0.3%
1994	1.4%	0.0%	0.2%	0.0%	0.1%		0.0%	0.0%	0.9%	0.3%
1995	1.2%	0.0%	0.2%	0.0%	0.1%		0.0%	0.0%	0.7%	0.3%
1996	1.3%	0.0%	0.2%	0.0%	0.1%		0.0%	0.0%	0.6%	0.3%
1997	1.2%	0.0%	0.2%	0.0%	0.1%		0.1%	0.0%	0.6%	0.2%
1998	1.3%	0.0%	0.3%	0.0%	0.2%		0.1%	0.0%	0.6%	0.2%
1999	1.2%	0.0%	0.3%	0.0%	0.2%		0.1%	0.0%	0.5%	0.1%
2000	1.2%	0.0%	0.2%	0.0%	0.2%		0.1%	0.0%	0.5%	0.1%
2001	1.3%	0.0%	0.2%	0.0%	0.3%		0.0%	0.1%	0.5%	0.1%
2002	1.4%	0.0%	0.2%	0.0%	0.4%		0.0%	0.1%	0.6%	0.1%
2003	1.4%	0.0%	0.3%	0.0%	0.4%		0.0%	0.0%	0.5%	0.1%
2004	1.3%	0.0%	0.2%	0.0%	0.2%		0.0%	0.1%	0.6%	0.1%
2005	1.3%	0.0%	0.2%	0.0%	0.2%		0.0%	0.1%	0.7%	0.1%
2006	1.2%	0.0%	0.2%	0.0%	0.2%		0.0%	0.0%	0.7%	0.1%
2007	1.1%	0.0%	0.2%	0.0%	0.2%		0.0%	0.0%	0.6%	0.1%
2008	1.2%	0.0%	0.2%	0.0%	0.2%		0.0%	0.0%	0.7%	0.1%
2009	1.8%	0.0%	0.2%	0.0%	0.1%		0.0%	0.0%	1.3%	0.1%

Table C.16 Lithuania: Expenditures on labour market policy measures as a % of GDP

Year	0. LMP Total	1. PES and administration	2. Training	3. Job rotation and job sharing	4. Employment incentives	5. Supported employment rehabilitation	6. Direct job creation	7. Start-up incentives	8. Out-of-work income support	9. Early retirement
1985										
1986										
1987										
1988										
1989										
1990										
1991										
1992										
1993										
1994										
1995										
1996										
1997										
1998										
1999										
2000										
2001										
2002										
2003	0.3%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%
2004	0.3%	0.0%	0.1%	0.0%	0.0%	0.0%	0.1%	0.0%	0.1%	0.0%
2005	0.4%	0.1%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.1%	0.1%
2006	0.4%	0.1%	0.1%	0.0%	0.1%	0.0%	0.0%	0.0%	0.1%	0.1%
2007	0.4%	0.1%	0.1%	0.0%	0.1%	0.0%	0.0%	0.0%	0.1%	0.0%
2008	0.4%	0.1%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.2%	0.0%
2009	0.9%	0.1%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.6%	0.0%

Table C.17 Luxembourg: Expenditures on labour market policy measures as a % of GDP

Year	0. LMP Total	1. PES and administration	2. Training	3. Job rotation and job sharing	4. Employment incentives	5. Supported employment rehabilitation	6. Direct job creation	7. Start-up incentives	8. Out-of-work income support	9. Early retirement
1985	1.4%	0.0%	0.1%	.	0.1%	0.2%	0.0%	0.0%	0.3%	0.6%
1986	1.2%	0.0%	0.1%	.	0.1%	0.2%	0.0%	0.0%	0.2%	0.6%
1987	1.3%	0.0%	0.1%	.	0.1%	0.2%	0.0%	0.0%	0.3%	0.6%
1988	1.2%	0.0%	0.1%	.	0.1%	0.2%	0.0%	0.0%	0.2%	0.6%
1989	0.9%	0.0%	0.1%	.	0.0%	0.1%	0.0%	0.0%	0.1%	0.5%
1990	0.8%	0.0%	0.1%	.	0.0%	0.1%	0.0%	0.0%	0.1%	0.5%
1991	0.8%	0.0%	0.1%	.	0.0%	0.0%	0.0%	0.0%	0.2%	0.4%
1992	0.7%	0.0%	0.1%	.	0.0%	0.0%	0.0%	0.0%	0.2%	0.4%
1993	0.8%	0.0%	0.1%	.	0.0%	0.0%	0.0%	0.0%	0.3%	0.4%
1994	0.9%	0.0%	0.1%	.	0.0%	0.0%	0.0%	0.0%	0.3%	0.4%
1995	0.8%	0.0%	0.1%	.	0.0%	0.0%	0.0%	0.0%	0.3%	0.4%
1996	0.9%	0.0%	0.1%	.	0.0%	0.0%	0.0%	0.0%	0.3%	0.4%
1997	0.9%	0.0%	0.1%	.	0.0%	0.0%	0.0%	0.0%	0.3%	0.3%
1998	0.8%	0.0%	0.1%	.	0.0%	0.0%	0.0%	0.0%	0.3%	0.3%
1999	0.7%	0.0%	0.1%	.	0.1%	0.0%	0.0%	0.0%	0.2%	0.3%
2000	0.7%	0.0%	0.1%	.	0.1%	0.0%	0.0%	0.0%	0.2%	0.2%
2001	0.7%	0.0%	0.1%	.	0.1%	0.0%	0.0%	0.0%	0.2%	0.2%
2002	0.9%	0.0%	0.1%	.	0.1%	0.0%	0.1%	0.0%	0.3%	0.2%
2003	1.0%	0.0%	0.1%	.	0.1%	0.0%	0.1%	0.0%	0.4%	0.2%
2004	1.1%	0.0%	0.1%	.	0.1%	0.0%	0.1%	0.0%	0.4%	0.2%
2005	1.1%	0.0%	0.1%	.	0.2%	0.0%	0.1%	0.0%	0.5%	0.2%
2006	1.0%	0.0%	0.1%	.	0.2%	0.0%	0.1%	0.0%	0.4%	0.2%
2007	0.9%	0.0%	0.1%	.	0.2%	0.0%	0.1%	0.0%	0.4%	0.2%
2008	0.9%	0.0%	0.0%	.	0.2%	0.0%	0.0%	0.0%	0.4%	0.2%
2009	1.3%	0.0%	0.0%	.	0.3%	0.0%	0.1%	0.0%	0.7%	0.2%

Table C.18 Latvia: Expenditures on labour market policy measures as a % of GDP

Year	0. LMP Total	1. PES and administration	2. Training	3. Job rotation and job sharing	4. Employment incentives	5. Supported employment rehabilitation	6. Direct job creation	7. Start-up incentives	8. Out-of-work income support	9. Early retirement
1985
1986
1987
1988
1989
1990
1991
1992
1993
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1995
1996
1997
1998
1999
2000
2001
2002
2003	0.5%	0.0%	0.0%	.	0.0%	0.0%	0.0%	0.0%	0.4%	.
2004	0.5%	0.0%	0.0%	.	0.0%	0.0%	0.0%	0.0%	0.4%	.
2005	0.5%	0.1%	0.1%	.	0.0%	0.0%	0.0%	0.0%	0.3%	.
2006	0.5%	0.1%	0.1%	.	0.0%	0.0%	0.0%	0.0%	0.3%	.
2007	0.5%	0.1%	0.0%	.	0.0%	0.0%	0.0%	0.0%	0.3%	.
2008	0.5%	0.1%	0.0%	.	0.0%	0.0%	0.0%	0.0%	0.3%	.
2009	1.3%	0.0%	0.1%	.	0.0%	0.0%	0.1%	0.0%	1.0%	.

Table C.19 Malta: Expenditures on labour market policy measures as a % of GDP

Year	0. LMP Total	1. PES and administration	2. Training	3. Job rotation and job sharing	4. Employment incentives	5. Supported employment rehabilitation	6. Direct job creation	7. Start-up incentives	8. Out-of-work income support	9. Early retirement
1985
1986
1987
1988
1989
1990
1991
1992
1993
1994
1995	0.5%	.
1996
1997
1998
1999
2000	0.7%	.
2001
2002
2003
2004
2005	.	.	0.0%	.	.	.	.	.	0.8%	.
2006	0.6%	0.1%	0.1%	.	0.0%	.	0.0%	0.0%	0.4%	.
2007	0.5%	0.1%	0.0%	.	0.0%	.	0.0%	0.0%	0.4%	.
2008	0.5%	0.1%	0.0%	.	0.0%	.	0.0%	0.0%	0.3%	.
2009	0.5%	0.1%	0.0%	.	0.0%	.	0.0%	0.0%	0.4%	.

Table C.20 Netherlands: Expenditures on labour market policy measures as a % of GDP

Year	0. LMP Total	1. PES and administration	2. Training	3. Job rotation and job sharing	4. Employment incentives	5. Supported employment rehabilitation	6. Direct job creation	7. Start-up incentives	8. Out-of-work income support	9. Early retirement
1985	4.4%	0.4%	0.1%	.	0.0%	0.7%	0.0%	.	3.2%	.
1986	4.2%	0.4%	0.1%	.	0.0%	0.7%	0.1%	.	3.0%	.
1987	4.2%	0.4%	0.1%	.	0.0%	0.7%	0.0%	.	3.0%	.
1988	4.0%	0.4%	0.1%	.	0.0%	0.6%	0.0%	.	2.8%	.
1989	3.8%	0.4%	0.1%	.	0.0%	0.6%	0.0%	.	2.6%	.
1990	3.6%	0.4%	0.1%	.	0.0%	0.6%	0.0%	.	2.4%	.
1991	3.5%	0.4%	0.1%	.	0.0%	0.6%	0.0%	.	2.4%	.
1992	3.7%	0.4%	0.1%	.	0.0%	0.6%	0.1%	.	2.5%	.
1993	4.1%	0.5%	0.1%	.	0.0%	0.6%	0.1%	.	2.7%	.
1994	4.3%	0.5%	0.1%	.	0.0%	0.6%	0.1%	.	2.9%	.
1995	4.1%	0.5%	0.1%	.	0.0%	0.5%	0.1%	.	2.8%	.
1996	4.5%	0.5%	0.1%	.	0.0%	0.5%	0.2%	.	3.2%	.
1997	4.2%	0.5%	0.1%	.	0.1%	0.5%	0.3%	.	2.8%	.
1998	3.9%	0.5%	0.1%	.	0.1%	0.6%	0.3%	.	2.4%	.
1999	3.5%	0.5%	0.1%	.	0.1%	0.6%	0.3%	.	2.0%	.
2000	3.2%	0.4%	0.1%	.	0.1%	0.6%	0.3%	.	1.8%	.
2001	3.1%	0.4%	0.1%	.	0.0%	0.6%	0.3%	.	1.7%	.
2002	3.3%	0.5%	0.1%	.	0.0%	0.6%	0.3%	.	1.7%	.
2003	3.5%	0.5%	0.1%	.	0.0%	0.6%	0.2%	.	2.0%	.
2004	3.5%	0.5%	0.1%	.	0.0%	0.6%	0.2%	.	2.1%	.
2005	3.3%	0.4%	0.1%	.	0.2%	0.5%	0.0%	.	2.0%	.
2006	2.9%	0.4%	0.1%	.	0.2%	0.5%	0.0%	.	1.7%	.
2007	2.5%	0.4%	0.1%	.	0.2%	0.5%	0.0%	.	1.4%	.
2008	2.3%	0.3%	0.1%	.	0.1%	0.5%	0.0%	.	1.3%	.
2009	2.9%	0.4%	0.1%	.	0.2%	0.5%	0.0%	.	1.7%	.

Table C.21 Poland: Expenditures on labour market policy measures as a % of GDP

Year	0. LMP Total	1. PES and administration	2. Training	3. Job rotation and job sharing	4. Employment incentives	5. Supported employment rehabilitation	6. Direct job creation	7. Start-up incentives	8. Out-of-work income support	9. Early retirement
1985										
1986										
1987										
1988										
1989										
1990										
1991	1.5%	0.0%	0.2%		0.1%	0.0%	0.0%	0.0%	1.3%	0.0%
1992	2.5%	0.0%	0.2%		0.0%	0.0%	0.0%	0.0%	1.6%	0.7%
1993	2.3%	0.0%	0.1%		0.1%	0.2%	0.1%	0.0%	1.6%	0.1%
1994	2.0%	0.0%	0.1%		0.1%	0.1%	0.1%	0.0%	1.5%	0.1%
1995	2.0%	0.0%	0.1%		0.1%	0.1%	0.1%	0.0%	1.6%	0.0%
1996	2.0%	0.0%	0.1%		0.1%	0.2%	0.0%	0.0%	1.5%	0.0%
1997	1.5%	0.0%	0.1%		0.1%	0.2%	0.1%	0.0%	0.9%	0.1%
1998	1.0%	0.0%	0.1%		0.1%	0.2%	0.0%	0.0%	0.4%	0.1%
1999	1.0%	0.0%	0.1%		0.0%	0.1%	0.0%	0.0%	0.4%	0.2%
2000	1.0%	0.0%	0.1%		0.0%	0.1%	0.0%	0.0%	0.5%	0.3%
2001	1.2%	0.0%	0.1%		0.0%	0.1%	0.0%	0.0%	0.5%	0.4%
2002	1.3%	0.0%	0.1%		0.0%	0.1%	0.0%	0.0%	0.5%	0.6%
2003	1.4%	0.1%	0.1%		0.0%	0.2%	0.0%	0.0%	0.4%	0.6%
2004	1.4%	0.1%	0.1%		0.0%	0.1%	0.0%	0.0%	0.4%	0.6%
2005	1.3%	0.1%	0.1%		0.0%	0.2%	0.0%	0.0%	0.3%	0.6%
2006	1.2%	0.1%	0.1%		0.0%	0.2%	0.0%	0.0%	0.3%	0.5%
2007	1.0%	0.1%	0.1%		0.1%	0.2%	0.0%	0.0%	0.2%	0.3%
2008	0.9%	0.1%	0.1%		0.1%	0.2%	0.0%	0.1%	0.1%	0.2%
2009	1.6%	0.1%	0.7%		0.2%	0.2%	0.0%	0.1%	0.2%	0.1%

Table C.22 Portugal: Expenditures on labour market policy measures as a % of GDP

Year	0. LMP Total	1. PES and administration	2. Training	3. Job rotation and job sharing	4. Employment incentives	5. Supported employment rehabilitation	6. Direct job creation	7. Start-up incentives	8. Out-of-work income support	9. Early retirement
1985										
1986	0.5%	0.1%	0.0%		0.0%	0.0%	0.0%	0.0%	0.3%	0.0%
1987	0.5%	0.1%	0.0%		0.1%	0.0%	0.0%	0.0%	0.3%	0.0%
1988	0.5%	0.1%	0.0%		0.1%	0.0%	0.0%	0.0%	0.2%	0.0%
1989	0.5%	0.1%	0.1%		0.1%	0.0%	0.0%	0.0%	0.2%	0.0%
1990	0.8%	0.1%	0.2%		0.1%	0.0%	0.0%	0.0%	0.2%	0.1%
1991	0.9%	0.1%	0.3%		0.1%	0.0%	0.0%	0.0%	0.3%	0.1%
1992	1.1%	0.1%	0.3%		0.1%	0.0%	0.0%	0.0%	0.5%	0.1%
1993	1.4%	0.1%	0.3%		0.1%	0.0%	0.0%	0.0%	0.7%	0.1%
1994	1.4%	0.1%	0.2%		0.1%	0.0%	0.0%	0.0%	0.8%	0.1%
1995	1.3%	0.1%	0.2%		0.1%	0.0%	0.0%	0.0%	0.8%	0.1%
1996	1.3%	0.1%	0.2%		0.1%	0.0%	0.0%	0.0%	0.7%	0.1%
1997	1.3%	0.1%	0.2%		0.1%	0.0%	0.0%	0.0%	0.6%	0.1%
1998	1.3%	0.1%	0.2%		0.1%	0.0%	0.1%	0.0%	0.6%	0.2%
1999	1.3%	0.1%	0.2%		0.1%	0.0%	0.0%	0.0%	0.6%	0.2%
2000	1.4%	0.1%	0.2%		0.2%	0.0%	0.0%	0.0%	0.6%	0.2%
2001	1.5%	0.1%	0.2%		0.2%	0.0%	0.0%	0.0%	0.7%	0.3%
2002	1.5%	0.1%	0.2%		0.2%	0.0%	0.0%	0.0%	0.8%	0.2%
2003	1.8%	0.1%	0.3%		0.2%	0.0%	0.0%	0.0%	1.0%	0.2%
2004	1.8%	0.1%	0.3%		0.2%	0.0%	0.0%	0.0%	1.1%	0.1%
2005	1.9%	0.1%	0.3%		0.2%	0.0%	0.0%	0.0%	1.2%	0.1%
2006	1.8%	0.1%	0.2%		0.1%	0.0%	0.0%	0.0%	1.1%	0.1%
2007	1.5%	0.1%	0.2%		0.1%	0.0%	0.0%	0.0%	1.0%	0.1%
2008	1.5%	0.1%	0.2%		0.1%	0.0%	0.0%	0.0%	0.9%	0.1%
2009	2.4%	0.1%	0.5%		0.1%	0.0%	0.0%	0.0%	1.4%	0.1%

Table C.23 Romania: Expenditures on labour market policy measures as a % of GDP

Year	0. LMP Total	1. PES and administration	2. Training	3. Job rotation and job sharing	4. Employment incentives	5. Supported employment rehabilitation	6. Direct job creation	7. Start-up incentives	8. Out-of-work income support	9. Early retirement
1985	.	.	.	.	.	.	.	.	.	.
1986	.	.	.	.	.	.	.	.	.	.
1987	.	.	.	.	.	.	.	.	.	.
1988	.	.	.	.	.	.	.	.	.	.
1989	.	.	.	.	.	.	.	.	.	.
1990	.	.	.	.	.	.	.	.	.	.
1991	.	.	.	.	.	.	.	.	.	.
1992	.	.	.	.	.	.	.	.	.	.
1993	.	.	.	.	.	.	.	.	.	.
1994	.	.	.	.	.	.	.	.	.	.
1995	.	.	.	.	.	.	.	.	.	.
1996	.	.	.	.	.	.	.	.	.	.
1997	.	.	.	.	.	.	.	.	.	.
1998	.	.	.	.	.	.	.	.	.	.
1999	.	.	.	.	.	.	.	.	.	.
2000	.	.	.	.	.	.	.	.	.	.
2001	.	.	.	.	.	.	.	.	.	.
2002	.	.	.	.	.	.	.	.	.	.
2003	0.6%	0.0%	0.0%	.	0.1%	.	0.0%	0.0%	0.5%	.
2004	0.6%	0.0%	0.0%	.	0.1%	.	0.0%	0.0%	0.4%	.
2005	0.5%	0.0%	0.0%	.	0.1%	.	0.0%	0.0%	0.4%	.
2006	0.4%	0.0%	0.0%	.	0.1%	.	0.0%	0.0%	0.3%	.
2007	0.3%	0.0%	0.0%	.	0.0%	.	0.0%	0.0%	0.2%	.
2008	0.3%	0.0%	0.0%	.	0.0%	.	0.0%	0.0%	0.2%	.
2009	0.4%	0.0%	0.0%	.	0.0%	.	0.0%	0.0%	0.4%	.

Table C24 Sweden: Expenditures on labour market policy measures as a % of GDP

Year	0. LMP Total	1. PES and administration	2. Training	3. Job rotation and job sharing	4. Employment incentives	5. Supported employment rehabilitation	6. Direct job creation	7. Start-up incentives	8. Out-of-work income support	9. Early retirement
1985	2.9%	0.2%	0.7%	0.0%	0.5%	0.4%	0.3%	0.0%	0.7%	0.1%
1986	2.8%	0.2%	0.7%	0.0%	0.4%	0.4%	0.2%	0.0%	0.8%	0.1%
1987	2.6%	0.2%	0.6%	0.0%	0.4%	0.4%	0.2%	0.0%	0.7%	0.1%
1988	2.4%	0.2%	0.6%	0.0%	0.4%	0.4%	0.1%	0.0%	0.6%	0.1%
1989	2.1%	0.2%	0.5%	0.0%	0.4%	0.3%	0.1%	0.0%	0.5%	0.1%
1990	2.5%	0.2%	0.5%	0.0%	0.4%	0.4%	0.1%	0.0%	0.8%	0.1%
1991	3.7%	0.2%	0.9%	0.0%	0.6%	0.4%	0.1%	0.0%	1.5%	0.1%
1992	5.2%	0.2%	1.0%	0.0%	0.8%	0.4%	0.2%	0.0%	2.4%	0.1%
1993	5.3%	0.2%	1.1%	0.0%	0.8%	0.4%	0.1%	0.1%	2.6%	0.0%
1994	5.1%	0.3%	1.0%	0.0%	0.8%	0.4%	0.2%	0.1%	2.4%	0.0%
1995	4.6%	0.2%	1.1%	0.0%	0.6%	0.3%	0.2%	0.1%	2.1%	0.0%
1996	4.4%	0.2%	1.0%	0.0%	0.6%	0.3%	0.2%	0.1%	2.0%	0.0%
1997	4.1%	0.2%	1.1%	0.0%	0.3%	0.3%	0.1%	0.1%	2.0%	0.0%
1998	4.2%	0.2%	1.3%	0.1%	0.4%	0.3%	0.1%	0.1%	1.7%	0.1%
1999	3.8%	0.2%	1.0%	0.1%	0.5%	0.3%	0.1%	0.1%	1.5%	0.1%
2000	3.0%	0.2%	0.7%	0.0%	0.5%	0.3%	0.0%	0.0%	1.3%	0.1%
2001	2.6%	0.2%	0.7%	0.0%	0.4%	0.2%	0.0%	0.0%	1.0%	0.0%
2002	2.5%	0.2%	0.6%	0.0%	0.4%	0.2%	0.0%	0.0%	1.0%	0.0%
2003	2.4%	0.2%	0.4%	0.0%	0.4%	0.2%	0.0%	0.0%	1.2%	0.0%
2004	2.4%	0.2%	0.3%	0.0%	0.4%	0.2%	0.0%	0.0%	1.3%	0.0%
2005	2.4%	0.2%	0.3%	0.0%	0.4%	0.2%	0.0%	0.0%	1.2%	0.0%
2006	2.2%	0.2%	0.3%	0.1%	0.5%	0.2%	0.0%	0.0%	0.9%	0.0%
2007	1.7%	0.2%	0.2%	0.0%	0.5%	0.2%	0.0%	0.0%	0.7%	0.0%
2008	1.4%	0.3%	0.1%	0.0%	0.4%	0.2%	0.0%	0.0%	0.4%	0.0%
2009	1.8%	0.4%	0.1%	0.0%	0.4%	0.2%	0.0%	0.0%	0.7%	0.0%

Table C.25 Slovenia: Expenditures on labour market policy measures as a % of GDP

Year	0. LMP Total	1. PES and administration	2. Training	3. Job rotation and job sharing	4. Employment incentives	5. Supported employment rehabilitation	6. Direct job creation	7. Start-up incentives	8. Out-of-work income support	9. Early retirement
1985	.	.	.	.	.	.	.	.	.	.
1986	.	.	.	.	.	.	.	.	.	.
1987	.	.	.	.	.	.	.	.	.	.
1988	.	.	.	.	.	.	.	.	.	.
1989	.	.	.	.	.	.	.	.	.	.
1990	.	.	.	.	.	.	.	.	.	.
1991	.	.	.	.	.	.	.	.	.	.
1992	.	.	.	.	.	.	.	.	.	.
1993	.	.	.	.	.	.	.	.	.	.
1994	.	.	.	.	.	.	.	.	.	.
1995	.	.	.	.	.	.	.	.	.	.
1996	.	.	.	.	.	.	.	.	.	.
1997	.	.	.	.	.	.	.	.	.	.
1998	.	.	.	.	.	.	.	.	.	.
1999	.	.	.	.	.	.	.	.	.	.
2000	.	.	.	.	.	.	.	.	.	.
2001	.	.	.	.	.	.	.	.	.	.
2002	.	.	.	.	.	.	.	.	.	.
2003	0.6%	0.0%	0.0%	0.0%	0.1%	0.0%	0.1%	0.0%	0.4%	.
2004	0.6%	0.0%	0.0%	0.0%	0.1%	0.0%	0.1%	0.0%	0.3%	.
2005	0.7%	0.1%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.4%	.
2006	0.7%	0.1%	0.1%	0.0%	0.0%	0.0%	0.1%	0.0%	0.4%	.
2007	0.5%	0.1%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.3%	.
2008	0.4%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	.
2009	1.0%	0.1%	0.1%	0.0%	0.0%	0.0%	0.1%	0.1%	0.6%	.

Table C.26 Slovakia: Expenditures on labour market policy measures as a % of GDP

Year	0. LMP Total	1. PES and administration	2. Training	3. Job rotation and job sharing	4. Employment incentives	5. Supported employment rehabilitation	6. Direct job creation	7. Start-up incentives	8. Out-of-work income support	9. Early retirement
1985										
1986										
1987										
1988										
1989										
1990										
1991	0.8%	0.1%	0.0%		0.0%	0.0%	0.0%	0.1%	0.6%	0.0%
1992	1.3%	0.1%	0.1%		0.0%	0.0%	0.1%	0.3%	0.7%	0.1%
1993	0.7%	0.1%	0.0%		0.0%	0.0%	0.0%	0.1%	0.3%	0.1%
1994	0.7%	0.1%	0.0%		0.0%	0.0%	0.0%	0.2%	0.2%	0.1%
1995	0.8%	0.1%	0.0%		0.0%	0.0%	0.1%	0.3%	0.2%	0.1%
1996	1.0%	0.1%	0.0%		0.0%	0.0%	0.1%	0.2%	0.3%	0.1%
1997	0.9%	0.2%	0.0%		0.1%	0.0%	0.1%	0.0%	0.4%	0.1%
1998	0.9%	0.1%	0.0%		0.1%	0.0%	0.1%	0.0%	0.5%	0.1%
1999	0.9%	0.1%	0.0%		0.0%	0.0%	0.0%	0.0%	0.6%	0.1%
2000	0.8%	0.1%	0.0%		0.0%	0.0%	0.1%	0.0%	0.5%	0.1%
2001	0.6%	0.1%	0.0%		0.0%	0.0%	0.1%	0.0%	0.3%	0.0%
2002	0.5%	0.1%	0.0%		0.0%	0.0%	0.1%	0.0%	0.3%	0.0%
2003	0.4%	0.1%	0.0%		0.0%	0.0%	0.0%	0.0%	0.2%	0.0%
2004	0.5%	0.1%	0.0%		0.0%	0.0%	0.0%	0.0%	0.3%	0.0%
2005	0.6%	0.2%	0.0%		0.0%	0.0%	0.1%	0.0%	0.2%	0.1%
2006	0.7%	0.2%	0.0%		0.0%	0.0%	0.1%	0.0%	0.1%	0.2%
2007	0.6%	0.1%	0.0%		0.0%	0.0%	0.0%	0.0%	0.1%	0.3%
2008	0.7%	0.1%	0.0%		0.0%	0.0%	0.1%	0.1%	0.1%	0.3%
2009	0.9%	0.1%	0.0%		0.0%	0.0%	0.0%	0.1%	0.3%	0.4%

Table C.27 United Kingdom: Expenditures on labour market policy measures as a % of GDP

Year	0. LMP Total	1. PES and administration	2. Training	3. Job rotation and job sharing	4. Employment incentives	5. Supported employment rehabilitation	6. Direct job creation	7. Start-up incentives	8. Out-of-work income support	9. Early retirement
1985	2.2%	0.4%	0.1%	.	0.0%	0.0%	0.2%	0.0%	1.5%	.
1986	2.2%	0.4%	0.1%	.	0.0%	0.0%	0.3%	0.0%	1.4%	.
1987	2.0%	0.4%	0.1%	.	0.0%	0.0%	0.3%	0.0%	1.2%	.
1988	1.5%	0.3%	0.1%	.	0.0%	0.0%	0.1%	0.0%	0.8%	.
1989	1.1%	0.2%	0.2%	.	0.0%	0.0%	0.0%	0.0%	0.6%	.
1990	1.1%	0.3%	0.2%	.	0.0%	0.0%	0.0%	0.0%	0.7%	.
1991	1.5%	0.4%	0.1%	.	0.0%	0.0%	0.0%	0.0%	1.0%	.
1992	1.7%	0.3%	0.1%	.	0.0%	0.0%	0.0%	0.0%	1.1%	.
1993	1.7%	0.4%	0.1%	.	0.0%	0.0%	0.0%	0.0%	1.1%	.
1994	1.5%	0.4%	0.1%	.	0.0%	0.0%	0.0%	0.0%	0.9%	.
1995	1.3%	0.4%	0.1%	.	0.0%	0.0%	0.0%	0.0%	0.8%	.
1996	1.1%	0.3%	0.1%	.	0.0%	0.0%	0.0%	0.0%	0.6%	.
1997	0.8%	0.2%	0.1%	.	0.0%	0.0%	0.0%	0.0%	0.5%	.
1998	0.8%	0.3%	0.0%	.	0.0%	0.0%	0.0%	0.0%	0.4%	.
1999	0.8%	0.3%	0.0%	.	0.0%	0.0%	0.0%	0.0%	0.4%	.
2000	0.8%	0.4%	0.0%	.	0.0%	0.0%	0.0%	0.0%	0.3%	.
2001	0.7%	0.4%	0.0%	.	0.0%	0.0%	0.0%	0.0%	0.3%	.
2002	0.6%	0.3%	0.0%	.	0.0%	0.0%	0.0%	0.0%	0.2%	.
2003	0.6%	0.3%	0.0%	.	0.0%	0.0%	0.0%	0.0%	0.2%	.
2004	0.6%	0.4%	0.0%	.	0.0%	0.0%	0.0%	0.0%	0.2%	.
2005	0.6%	0.4%	0.0%	.	0.0%	0.0%	0.0%	0.0%	0.2%	.
2006	0.5%	0.3%	0.0%	.	0.0%	0.0%	0.0%	0.0%	0.2%	.
2007	0.5%	0.3%	0.0%	.	0.0%	0.0%	0.0%	0.0%	0.2%	.
2008	0.5%	0.3%	0.0%	.	0.0%	0.0%	0.0%	0.0%	0.2%	.
2009	0.7%	0.3%	0.0%	.	0.0%	0.0%	0.0%	0.0%	0.3%	.

Table C.28 Switzerland: Expenditures on labour market policy measures as a % of GDP

Year	0. LMP Total	1. PES and administration	2. Training	3. Job rotation and job sharing	4. Employment incentives	5. Supported employment rehabilitation	6. Direct job creation	7. Start-up incentives	8. Out-of-work income support	9. Early retirement
1985	0.4%	0.1%	0.0%	.	0.0%	0.1%	.	0.0%	0.3%	.
1986	0.4%	0.1%	0.0%	.	0.0%	0.1%	.	0.0%	0.2%	.
1987	0.4%	0.1%	0.0%	.	0.0%	0.1%	.	0.0%	0.2%	.
1988	0.4%	0.1%	0.0%	.	0.0%	0.1%	.	0.0%	0.2%	.
1989	0.3%	0.1%	0.0%	.	0.0%	0.1%	.	0.0%	0.1%	.
1990	0.3%	0.1%	0.0%	.	0.0%	0.1%	.	0.0%	0.1%	.
1991	0.6%	0.1%	0.0%	.	0.0%	0.1%	.	0.0%	0.3%	.
1992	1.2%	0.1%	0.0%	.	0.0%	0.2%	.	0.0%	0.9%	.
1993	1.9%	0.1%	0.1%	.	0.0%	0.2%	.	0.0%	1.6%	.
1994	1.8%	0.1%	0.1%	.	0.0%	0.2%	.	0.0%	1.4%	.
1995	1.6%	0.1%	0.2%	.	0.0%	0.2%	.	0.0%	1.1%	.
1996	1.8%	0.1%	0.3%	.	0.0%	0.2%	.	0.0%	1.2%	.
1997	2.1%	0.1%	0.4%	.	0.0%	0.2%	.	0.0%	1.3%	.
1998	1.9%	0.1%	0.4%	.	0.1%	0.2%	.	0.0%	1.1%	.
1999	1.6%	0.1%	0.3%	.	0.1%	0.2%	.	0.0%	0.9%	.
2000	1.1%	0.1%	0.2%	.	0.1%	0.2%	.	0.0%	0.5%	.
2001	1.0%	0.1%	0.2%	.	0.0%	0.2%	.	0.0%	0.5%	.
2002	1.3%	0.1%	0.2%	.	0.0%	0.2%	.	0.0%	0.8%	.
2003	1.8%	0.1%	0.3%	.	0.1%	0.2%	.	0.0%	1.1%	.
2004	1.8%	0.1%	0.3%	.	0.1%	0.2%	.	0.0%	1.0%	.
2005	1.7%	0.1%	0.3%	.	0.1%	0.2%	.	0.0%	0.9%	.
2006	1.4%	0.1%	0.2%	.	0.1%	0.2%	.	0.0%	0.8%	.
2007	1.1%	0.1%	0.2%	.	0.1%	0.2%	.	0.0%	0.6%	.
2008	1.1%	0.1%	0.2%	.	0.1%	0.2%	.	0.0%	0.5%	.
2009	1.6%	0.1%	0.2%	.	0.1%	0.2%	.	0.0%	1.0%	.

Table C.29 Norway: Expenditures on labour market policy measures as a % of GDP

Year	0. LMP Total	1. PES and administration	2. Training	3. Job rotation and job sharing	4. Employment incentives	5. Supported employment rehabilitation	6. Direct job creation	7. Start-up incentives	8. Out-of-work income support	9. Early retirement
1985	1.1%	0.1%	0.1%	0.0%	0.1%	0.1%	0.2%	0.0%	0.5%	.
1986	0.8%	0.1%	0.1%	0.0%	0.0%	0.1%	0.1%	0.0%	0.4%	.
1987	0.7%	0.1%	0.1%	0.0%	0.0%	0.1%	0.0%	0.0%	0.4%	.
1988	0.9%	0.1%	0.1%	0.0%	0.0%	0.1%	0.0%	0.0%	0.6%	.
1989	1.8%	0.1%	0.3%	0.0%	0.1%	0.1%	0.1%	0.0%	1.0%	.
1990	2.0%	0.1%	0.4%	0.0%	0.1%	0.1%	0.2%	0.0%	1.1%	.
1991	2.1%	0.1%	0.4%	0.0%	0.1%	0.1%	0.2%	0.0%	1.2%	.
1992	2.4%	0.1%	0.4%	0.0%	0.1%	0.1%	0.2%	0.0%	1.4%	.
1993	2.6%	0.2%	0.4%	0.0%	0.1%	0.1%	0.3%	0.0%	1.5%	.
1994	2.6%	0.2%	0.5%	0.1%	0.1%	0.1%	0.3%	0.0%	1.3%	.
1995	2.3%	0.2%	0.6%	0.1%	0.1%	0.1%	0.3%	0.0%	1.1%	.
1996	2.0%	0.2%	0.5%	0.0%	0.1%	0.1%	0.2%	0.0%	0.9%	.
1997	1.6%	0.1%	0.4%	0.0%	0.0%	0.1%	0.1%	0.0%	0.7%	.
1998	1.3%	0.1%	0.4%	0.0%	0.0%	0.1%	0.1%	0.0%	0.5%	.
1999	1.2%	0.1%	0.3%	0.0%	0.0%	0.1%	0.1%	0.0%	0.5%	.
2000	1.1%	0.1%	0.3%	0.0%	0.0%	0.1%	0.1%	0.0%	0.5%	.
2001	1.2%	0.1%	0.3%	0.0%	0.0%	0.1%	0.1%	0.0%	0.5%	.
2002	1.3%	0.1%	0.4%	0.0%	0.0%	0.1%	0.1%	0.0%	0.7%	.
2003	1.7%	0.1%	0.4%	0.0%	0.0%	0.1%	0.1%	0.0%	0.9%	.
2004	1.6%	0.1%	0.4%	0.0%	0.0%	0.1%	0.1%	0.0%	0.8%	.
2005	1.6%	0.1%	0.4%	0.0%	0.0%	0.1%	0.1%	0.0%	0.9%	.
2006	1.1%	0.1%	0.3%	0.0%	0.0%	0.1%	0.1%	0.0%	0.5%	.
2007	1.0%	0.1%	0.2%	0.0%	0.0%	0.1%	0.0%	0.0%	0.4%	.
2008	0.8%	0.1%	0.2%	0.0%	0.0%	0.1%	0.0%	0.0%	0.3%	.
2009	1.1%	0.1%	0.2%	0.0%	0.0%	0.2%	0.0%	0.0%	0.5%	.

Table C.30 US: Expenditures on labour market policy measures as a % of GDP

Year	0. LMP Total	1. PES and administration	2. Training	3. Job rotation and job sharing	4. Employment incentives	5. Supported employment rehabilitation	6. Direct job creation	7. Start-up incentives	8. Out-of-work income support	9. Early retirement
1985	0.8%	0.1%	0.1%	.	0.0%	0.0%	0.0%	.	0.6%	.
1986	0.8%	0.1%	0.1%	.	0.0%	0.0%	0.0%	.	0.5%	.
1987	0.7%	0.1%	0.1%	.	0.0%	0.0%	0.0%	.	0.5%	.
1988	0.6%	0.1%	0.1%	.	0.0%	0.0%	0.0%	.	0.4%	.
1989	0.7%	0.1%	0.1%	.	0.0%	0.0%	0.0%	.	0.4%	.
1990	0.7%	0.1%	0.1%	.	0.0%	0.0%	0.0%	.	0.5%	.
1991	0.9%	0.1%	0.1%	.	0.0%	0.0%	0.0%	.	0.7%	.
1992	0.8%	0.1%	0.1%	.	0.0%	0.0%	0.0%	.	0.6%	.
1993	0.6%	0.1%	0.1%	.	0.0%	0.0%	0.0%	.	0.4%	.
1994	0.5%	0.1%	0.1%	.	0.0%	0.0%	0.0%	.	0.4%	.
1995	0.5%	0.1%	0.1%	.	0.0%	0.0%	0.0%	.	0.3%	.
1996	0.4%	0.0%	0.1%	.	0.0%	0.0%	0.0%	.	0.3%	.
1997	0.4%	0.1%	0.1%	.	0.0%	0.0%	0.0%	.	0.2%	.
1998	0.4%	0.1%	0.1%	.	0.0%	0.0%	0.0%	.	0.2%	.
1999	0.4%	0.0%	0.1%	.	0.0%	0.0%	0.0%	.	0.2%	.
2000	0.4%	0.0%	0.1%	.	0.0%	0.0%	0.0%	.	0.3%	.
2001	0.6%	0.0%	0.1%	.	0.0%	0.0%	0.0%	.	0.5%	.
2002	0.7%	0.0%	0.1%	.	0.0%	0.0%	0.0%	.	0.5%	.
2003	0.5%	0.0%	0.1%	.	0.0%	0.0%	0.0%	.	0.4%	.
2004	0.4%	0.0%	0.1%	.	0.0%	0.0%	0.0%	.	0.3%	.
2005	0.4%	0.0%	0.0%	.	0.0%	0.0%	0.0%	.	0.3%	.
2006	0.4%	0.0%	0.0%	.	0.0%	0.0%	0.0%	.	0.2%	.
2007	0.4%	0.0%	0.0%	.	0.0%	0.0%	0.0%	.	0.3%	.
2008	1.0%	0.0%	0.1%	.	0.0%	0.0%	0.0%	.	0.8%	.
2009	1.2%	0.0%	0.1%	.	0.0%	0.0%	0.0%	.	1.0%	.

Table C.30 Japan: Expenditures on labour market policy measures as a % of GDP

Year	0. LMP Total	1. PES and administration	2. Training	3. Job rotation and job sharing	4. Employment incentives	5. Supported employment rehabilitation	6. Direct job creation	7. Start-up incentives	8. Out-of-work income support	9. Early retirement
1985	.	.	.	.	.	.	.	.	.	.
1986	.	.	.	.	.	.	.	.	.	.
1987	.	.	.	.	.	.	.	.	.	.
1988	.	.	.	.	.	.	.	.	.	.
1989	.	.	.	.	.	.	.	.	.	.
1990	0.6%	0.3%	0.0%	.	0.0%	0.0%	0.0%	0.0%	0.3%	.
1991	0.6%	0.3%	0.0%	.	0.0%	0.0%	0.0%	0.0%	0.3%	.
1992	0.6%	0.2%	0.0%	.	0.0%	0.0%	0.0%	0.0%	0.3%	.
1993	0.7%	0.3%	0.0%	.	0.0%	0.0%	0.0%	0.0%	0.4%	.
1994	0.7%	0.3%	0.0%	.	0.0%	0.0%	0.0%	0.0%	0.4%	.
1995	0.7%	0.3%	0.0%	.	0.0%	0.0%	0.0%	0.0%	0.4%	.
1996	0.7%	0.3%	0.0%	.	0.0%	0.0%	0.0%	0.0%	0.4%	.
1997	0.7%	0.3%	0.0%	.	0.0%	0.0%	0.0%	0.0%	0.4%	.
1998	0.8%	0.2%	0.0%	.	0.0%	0.0%	0.0%	0.0%	0.5%	.
1999	0.8%	0.2%	0.0%	.	0.0%	0.0%	0.0%	0.0%	0.5%	.
2000	0.8%	0.2%	0.0%	.	0.0%	0.0%	0.0%	0.0%	0.6%	.
2001	0.8%	0.2%	0.0%	.	0.0%	0.0%	0.0%	0.0%	0.5%	.
2002	0.8%	0.2%	0.0%	.	0.0%	0.0%	0.0%	0.0%	0.5%	.
2003	0.8%	0.2%	0.0%	.	0.0%	0.0%	0.0%	0.0%	0.5%	.
2004	0.7%	0.2%	0.0%	.	0.0%	0.0%	0.0%	0.0%	0.5%	.
2005	0.7%	0.2%	0.0%	.	0.0%	0.0%	0.0%	0.0%	0.4%	.
2006	0.6%	0.1%	0.0%	.	0.0%	0.0%	0.0%	0.0%	0.4%	.
2007	0.5%	0.1%	0.0%	.	0.0%	0.0%	0.0%	0.0%	0.3%	.
2008	0.6%	0.1%	0.0%	.	0.0%	0.0%	0.1%	0.0%	0.3%	.
2009	0.8%	0.1%	0.0%	.	0.0%	0.0%	0.1%	0.0%	0.5%	.

Annex D – Funding, responsible institutions

The following tables present data analysed on the origin of funding for the nine categories of labour market measures assessed. The three main sources of origin are presented in order of the percentage of contribution provided to the specific labour market measure category. In certain cases there are more than three sources of origin. However, as these additional sources do not represent more than 10% of the category in any of the cases, they are not presented in this table.

In addition to the origin of funding, the main responsible institute for the implementation of the measures is indicated per category. In many cases multiple institutes are responsible for specific measures in each category. However, only the main responsible institute, i.e. the institute responsible for the largest budget share of the category is presented. In cases where two institutes hold an approximate equal share of budgets (with no more than 5% difference) in one category, they are indicated to be equally shared. Lastly, data for certain categories of labour market measures are not available. These categories are indicated as 'n/a' in the tables.

The first table presents data from EU Member States in 2001. The second table provides the data from EU Member States in 2008. As more countries joined the EU in between these years, the data of these New Member States have been included in the table for 2008.

In case of co-funding, we assumed equal shares for the co-funded measure. Thus, if 80% of the total budget is spent on a measure completely funded from the general government budget, and 20% is spent on a measure co-funded from the general government budget and the social security fund, the respective shares are calculated as 90% and 10% respectively.²⁰² If a category has only one measure and that measure is co-funded by the general government budget and the social security fund, the distribution is assumed to be 50-50 whereas the distribution could actually be anything from 1-99 to 99-1.

²⁰² $90 = 80 + 20/2$ and $10 = 0 + 10/2$.

Table D.1 Overview of origin of funding and main responsible institute 2001

Country (2001)	#	Category	Main responsible institute	Main Origin		2 nd Origin		3 rd Origin	
				Origin	%	Origin	%	Origin	%
Austria	1	Labour market services	Public Employment Services	Social Security Fund	44%	General Govt	43%	ESF	7%
	2	Training	Public Employment Services	Social Security Fund	37%	General Govt	35%	ESF	21%
	3	Job rotation	Public Employment Services	General Govt	50%	Social Security Fund	50%		
	4	Employment Incentives	Public Employment Services	General Govt	47%	ESF	34%	Social Security Fund	19%
	5	Supported employment and rehabilitation	Central Government	Earmarked Taxes	46%	ESF	27%	Regional Govt	27%
	6	Direct job creation	Public Employment Services	General Govt	35%	Social Security Fund	35%	ESF	31%
	7	Start-up incentives	Public Employment Services	General Govt	50%	Social Security Fund	50%		
	8	Out-of-work income support	Public Employment Services	Social Security Fund	53%	General Govt	47%		
	9	Early retirement	Public Employment Services	Social Security Fund	62%	General Govt	38%		
	*	Mixed	Public Employment Services	Social Security Fund	37%	General Govt	37%	ESF	25%
Belgium	1	Labour market services	Public Employment Services	General Govt	65%	Regional Govt	25%	ESF	10%
	2	Training	Regional Govt	Regional Govt	58%	General Govt	19%	Social Security Fund	17%
	3	Job rotation	Public Employment Services	Local Govt	33%	General Govt	33%	Earmarked Taxes	33%
	4	Employment Incentives	Central Govt	General Govt	44%	Earmarked Taxes	41%	Social Security Fund	10%
	5	Supported employment and rehabilitation	Regional Govt	Regional Govt	100%				
	6	Direct job creation	Region Govt	Earmarked Taxes	36%	Regional	33%	General Govt	28%

Country (2001)	#	Category	Main responsible institute	Main Origin		2 nd Origin		3 rd Origin	
				Origin	%	Origin	%	Origin	%
						Govt			
	7	Start-up incentives	Central Govt	Earmarked Taxes	49%	General Govt	49%	Regional Govt	2%
	8	Out-of-work income support	Social Security Institute	Social Security Fund	84%	General Govt	16%		
	9	Early retirement	Public Employment Services	General Govt	54%	Social Security Fund	46%		
Germany	1	Labour market services	Public Employment Services	Social Security Fund	100%				
	2	Training	Public Employment Services	Social Security Fund	96%	ESF	3%	General Govt	1%
	3	Job rotation	Public Employment Services	n/a					
	4	Employment Incentives	Public Employment Services	Social Security Fund	100%				
	5	Supported employment and rehabilitation	Public Employment Services	Social Security Fund	100%				
	6	Direct job creation	Public Employment Services	Social Security Fund	100%				
	7	Start-up incentives	Public Employment Services	Social Security Fund	100%				
	8	Out-of-work income support	Public Employment Services	Social Security Fund	66%	General Govt	34%		
	9	Early retirement	Public Employment Services	Social Security Fund	100%				
	*	Mixed	Equal share between Central Govt, Regional Govt Public Employment Services	ESF	66%	Social Security Fund	34%		

Country (2001)	#	Category	Main responsible institute	Main Origin		2 nd Origin		3 rd Origin	
				Origin	%	Origin	%	Origin	%
Denmark	1	Labour market services	Equal share between Central Govt and Public Employment Services	General Govt	92%	Local Govt	8%		
	2	Training	Local Govt	General Govt	51%	Local Govt	49%		
	3	Job rotation	n/a	n/a					
	4	Employment Incentives	Equal share between Central Govt and Public Employment Services	General Govt	51%	Local Govt	49%		
	5	Supported employment and rehabilitation	Local Govt	Local Govt	51%	General Govt	49%		
	6	Direct job creation	Local Govt	Local Govt	50%	General Govt	50%		
	7	Start-up incentives	Equal share between Central Govt and Public Employment Services	General Govt	91%	Local Govt	9%		
	8	Out-of-work income support	Public Employment Services	General Govt	86%	Local Govt	13%	Social Security Fund	1%
	9	Early retirement	Equal share between Central Govt and Public Employment Services	General Govt	100%				
Greece	1	Labour market services	n/a	n/a					
	2	Training	Public Employment Services	ESF	50%	General Govt	50%		
	3	Job rotation	n/a	n/a					
	4	Employment Incentives	Public Employment	General Govt	50%	ESF	50%		

Country (2001)	#	Category	Main responsible institute	Main Origin		2 nd Origin		3 rd Origin	
				Origin	%	Origin	%	Origin	%
			Services						
	5	Supported employment and rehabilitation	Public Employment Services	General Govt	100%				
	6	Direct job creation	n/a	n/a					
	7	Start-up incentives	Public Employment Services	ESF	50%	General Govt	50%		
	8	Out-of-work income support	Public Employment Services	Social Security Fund	50%	General Govt	50%		
	9	Early retirement	n/a	n/a					
	*	Mixed	Public Employment Services	ESF	50%	General Govt	50%		
Spain	1	Labour market services	Public Employment Services	General Govt	81%	Regional Govt	19%		
	2	Training	Equal share between Local govt and Public Employment Services	ESF	49%	Social Security Fund	34%	General Govt	15%
	3	Job rotation	Public Employment Services	General Govt	99%	Regional Govt	1%		
	4	Employment Incentives	Public Employment Services	General Govt	49%	ESF	48%	Regional Govt	3%
	5	Supported employment and rehabilitation	Regional govt	General Govt	95%	Regional Govt	5%		
	6	Direct job creation	Public Employment Services	General Govt	68%	Regional Govt	17%	ESF	15%
	7	Start-up incentives	Public Employment Services	General Govt	45%	ESF	24%	Social Security Fund	21%
	8	Out-of-work income support	Public Employment Services	Social Security Fund	75%	General Govt	25%		
	9	Early retirement	Central govt	General Govt	80%	Social	20%		

Country (2001)	#	Category	Main responsible institute	Main Origin		2 nd Origin		3 rd Origin	
				Origin	%	Origin	%	Origin	%
Finland	1	Labour market services	Public Employment Services	General Govt	100%	Security Fund			
	2	Training	Public Employment Services	General Govt	34%	ESF	33%	Social Security Fund	32%
	3	Job rotation	Public Employment Services	General Govt	50%	Social Security Fund	40%	ESF	10%
	4	Employment Incentives	Public Employment Services	ESF	50%	General Govt	50%		
	5	Supported employment and rehabilitation	Social Security Institute	Social Security Fund	54%	ESF	15%	General Govt	15%
	6	Direct job creation	Public Employment Services	General Govt	50%	ESF	50%		
	7	Start-up incentives	Public Employment Services	ESF	50%	General Govt	50%		
	8	Out-of-work income support	Equal share between Social Security Institute and the Public Employment Services	General Govt	60%	Social Security Fund	40%		
	9	Early retirement	Equal share between Social Security Institute and the Public Employment Services	Social Security Fund	50%	General Govt	50%		
France	1	Labour market services	Equal share between PES and Social Security Institute	General Govt	43%	Social Security Fund	43%	ESF	7%

Country (2001)	#	Category	Main responsible institute	Main Origin		2 nd Origin		3 rd Origin	
				Origin	%	Origin	%	Origin	%
	2	Training	Central Govt	General Govt	62%	Regional Govt	15%	Social Security Fund	11%
	3	Job rotation	n/a						
	4	Employment Incentives	Central Govt	General Govt	51%	ESF	37%	Social Security Fund	13%
	5	Supported employment and rehabilitation	Central Govt	General Govt	100%				
	6	Direct job creation	Central Govt	General Govt	51%	Social Security Fund	24%	ESF	24%
	7	Start-up incentives	Central Govt	General Govt	100%				
	8	Out-of-work income support	Social Security Institute	Social Security Fund	77%	General Govt	12%	Earmarked Taxes	11%
	9	Early retirement	Social Security Institute	Social Security Fund	69%	General Govt	31%		
	*	Mixed	Equal share between Central Govt and Public Employment Services	Social Security Fund	50%	General Govt	50%		
	Ireland	1	Labour market services	Central Govt	General Govt	52%	ESF	48%	
2		Training	Central Govt	General Govt	50%	ESF	33%	Earmarked Taxes	16%
3		Job rotation	N/A						
4		Employment Incentives	Central Govt	General Govt	50%	Earmarked Taxes	47%	ESF	3%
5		Supported employment and rehabilitation	Public Employment Services	General Govt	100%				
6		Direct job creation	Public Employment Services	General Govt	90%	ESF	10%		
7		Start-up incentives	Central Govt	Earmarked Taxes	50%	General Govt	50%		
8		Out-of-work income support	Central Govt	Earmarked Taxes	36%	General Govt	36%	Social Security Fund	27%
9		Early retirement	Central Govt	General Govt	100%				

Country (2001)	#	Category	Main responsible institute	Main Origin		2 nd Origin		3 rd Origin	
				Origin	%	Origin	%	Origin	%
Italy	1	Labour market services	Public Employment Services	ESF	50%	Social Security Fund	50%		
	2	Training	Equal share between Social Security Institute and the Central Govt	General Govt	94%	ESF	6%		
	3	Job rotation	Social Security Institute	General Govt	100%				
	4	Employment Incentives	Social Security Institute	General Govt	100%				
	5	Supported employment and rehabilitation	N/A						
	6	Direct job creation	Equal share between Social Security Institute and the Central Govt	General Govt	100%				
	7	Start-up incentives	Central Govt	General Govt	97%	ESF	3%		
	8	Out-of-work income support	Social Security Institute	General Govt	51%	Earmarked Taxes	49%		
	9	Early retirement	Equal share between Social Security Institute, Central Govt and the Trade Unions	Social Security Fund	50%	General Govt	50%		
	*	Mixed	Social Security Institute	General Govt	82%	Social Security Fund	18%		
Luxembourg	1	Labour market services	Public Employment Services	Earmarked Taxes	50%		50%		
	2	Training	Public Employment Services	Earmarked Taxes	61%	General Govt	39%		

Country (2001)	#	Category	Main responsible institute	Main Origin		2 nd Origin		3 rd Origin	
				Origin	%	Origin	%	Origin	%
	3	Job rotation	N/A						
	4	Employment Incentives	Public Employment Services	General Govt	54%	Earmarked Taxes	46%		
	5	Supported employment and rehabilitation	Public Employment Services	General Govt	100%				
	6	Direct job creation	Central Govt	General Govt	52%	Earmarked Taxes	48%		
	7	Start-up incentives	Public Employment Services	Earmarked Taxes	50%		50%		
	8	Out-of-work income support	Public Employment Services	Earmarked Taxes	50%		50%		
	9	Early retirement	Public Employment Services	Earmarked Taxes	50%		50%		
Netherlands	1	Labour market services	Social Security Institute	General Govt	80%	ESF	20%		
	2	Training	Public Employment Services	General Govt	100%				
	3	Job rotation	Social Security Institute	Other funding	100%				
	4	Employment Incentives	Central Govt	General Govt	100%				
	5	Supported employment and rehabilitation	Local Govt	Local Govt	50%	Central Govt	50%		
	6	Direct job creation	Local Govt	General Govt	100%				
	7	Start-up incentives	N/A						
	8	Out-of-work income support	Social Security Institute	General Govt	100%				
	9	Early retirement	N/A						
	*	Mixed	Local Govt	General Govt	44%	Local Govt	34%	Social Security Fund	22%
Portugal	1	Labour market services	N/A						
	2	Training	Public Employment Services	ESF	38%	Social Security Fund	37%	Regional Govt	24%

Country (2001)	#	Category	Main responsible institute	Main Origin		2 nd Origin		3 rd Origin	
				Origin	%	Origin	%	Origin	%
	3	Job rotation	N/A						
	4	Employment Incentives	Social Security Institute	Social Security Fund	50%	ESF	49%	Regional Govt	1%
	5	Supported employment and rehabilitation	Public Employment Services	Social Security Fund	50%	ESF	49%		
	6	Direct job creation	Public Employment Services	ESF	49%	Social Security Fund	48%	Regional Govt	3%
	7	Start-up incentives	Public Employment Services	ESF	27%	Social Security Fund	27%	Regional Govt	24%
	8	Out-of-work income support	Social Security Institute	Social Security Fund	100%				
	9	Early retirement	Social Security Institute	Social Security Fund	100%				
	*	Mixed	Employment Services	ESF	67%	Social Security Fund	33%		
Sweden	1	Labour market services	Public Employment Services	General Govt	100%				
	2	Training	Public Employment Services	General Govt	100%				
	3	Job rotation	N/A						
	4	Employment Incentives	Public Employment Services	General Govt	100%				
	5	Supported employment and rehabilitation	Central Govt	General Govt	100%				
	6	Direct job creation	Public Employment Services	General Govt	100%				
	7	Start-up incentives	Public Employment Services	General Govt	100%				
	8	Out-of-work income support	Trade Unions	Social Security Fund	51%	General Govt	49%		
	9	Early retirement	Trade Unions	General Govt	100%				
		*	Mixed	Central Govt	General Govt	100%			

Country (2001)	#	Category	Main responsible institute	Main Origin		2 nd Origin		3 rd Origin	
				Origin	%	Origin	%	Origin	%
United Kingdom	1	Labour market services	Central Govt	General Govt	56%	Earmarked Taxes	44%		
	2	Training	Central Govt	ESF	50%	ESF	50%		
	3	Job rotation	N/A						
	4	Employment Incentives	Central Govt	General Govt	100%				
	5	Supported employment and rehabilitation	Equal share Central Govt and Public Employment Services	General Govt	100%				
	6	Direct job creation	N/A						
	7	Start-up incentives	Direct share Central Govt and Trade Unions	Earmarked Taxes	50%	General Govt	50%		
	8	Out-of-work income support	Equal share Central Govt and Public Employment Services	Social Security Fund	50%	General Govt	50%		
	9	Early retirement	N/A						
	*	Mixed	Public Employment Services	General Govt	60%	Earmarked Taxes	40%		

Table D.2 Overview of origin of funding and main responsible institute 2008

Country (2008)	#	Category	Main responsible Institute	Main origin		2 nd Origin		3 rd Origin	
				Origin	%	Origin	%	Origin	%
Austria	1	Labour market services	Public Employment services	Social Security Fund	42%	General Govt	40%	ESF	9%
	2	Training	Public Employment services	Social Security Fund	52%	General Govt	21%	ESF	18%
	3	Job rotation	Public Employment services	Social Security Fund	50%	General Govt	50%		
	4	Employment Incentives	Public Employment services	Social Security Fund	55%	General Govt	45%		
	5	Supported employment and rehabilitation	Central Govt	Earmarked Taxes	41%	ESF	30%	Regional Govt	30%
	6	Direct job creation	Public Employment services	Social Security Fund	34%	General Govt	33%	ESF	33%
	7	Start-up incentives	Public Employment services	Social Security Fund	50%	General Govt	50%		
	8	Out-of-work income support	Public Employment services	Social Security Fund	64%	General Govt	36%		
	9	Early retirement	Public Employment services	Social Security Fund	53%	Regional Govt	34%	General Govt	13%
	*	Mixed	Public Employment services	Social Security Fund	50%	General Govt	50%		
Belgium	1	Labour market services	Public Employment services	General Govt	60%	Regional Govt	26%	ESF	12%
	2	Training	Public Employment services	Regional Govt	66%	General Govt	28%	Social Security Fund	4%
	3	Job rotation	N/a	N/a					
	4	Employment Incentives	Central Govt	General Govt	62%	Social Security Fund	22%	Earmarked Taxes	16%
	5	Supported employment and rehabilitation	Regional Govt	Regional Govt	99%	General Govt	1%		
	6	Direct job creation	Regional Govt	Regional Govt	42%	General Govt	29%	Earmarked Taxes	26%
	7	Start-up incentives	Central Govt	Earmarked Taxes	49%	General Govt	49%	Regional Govt	1%
	8	Out-of-work income	Social Security Institute	Social Security	85%	General Govt	15%		

Country (2008)	#	Category	Main responsible Institute	Main origin		2 nd Origin		3 rd Origin	
				Origin	%	Origin	%	Origin	%
		support		Fund					
	9	Early retirement	Social Security Institute	Social Security Fund	56%	General Govt	44%		
Bulgaria	1	Labour market services	Public Employment services	General Govt	100%				
	2	Training	Public Employment services	General Govt	100%				
	3	Job rotation	N/A	N/A					
	4	Employment Incentives	Public Employment services	General Govt	100%				
	5	Supported employment and rehabilitation	Public Employment services	General Govt	100%				
	6	Direct job creation	Central Govt	General Govt	69%	Social Security Fund	31%		
	7	Start-up incentives	Public Employment services	General Govt	100%				
	8	Out-of-work income support	Social Security Institute	Social Security Fund	100%				
	9	Early retirement	N/A	N/A					
	*	Mixed	Public Employment services	General Govt	100%				
Cyprus	1	Labour market services	Public Employment services	ESF	50%	General Govt	50%		
	2	Training	Central Govt	Regional Govt	61%	ESF	39%		
	3	Job rotation	N/A						
	4	Employment Incentives	Central Govt	General Govt	85%	ESF	15%		
	5	Supported employment and rehabilitation	Central Govt	General Govt	69%	ESF	31%		
	6	Direct job rotation	N/A						
	7	Start-up incentives	Central Govt	General Govt	100%				
	8	Out-of-work income support	Social Security Institute	Social Security Fund	69%	Earmarked Taxes	16%	General Govt	16%
	9	Early retirement	N/A						
	*	Mixed	Central Govt	ESF	50%	General Govt	50%		

Country (2008)	#	Category	Main responsible Institute	Main origin		2 nd Origin		3 rd Origin	
				Origin	%	Origin	%	Origin	%
Czech Republic	1	Labour market services	Public Employment services	General Govt	100%				
	2	Training	Public Employment services	General Govt	100%				
	3	Job rotation	N/A						
	4	Employment Incentives	Public Employment services	General Govt	100%				
	5	Supported employment and rehabilitation	Public Employment services	Regional Govt	100%				
	6	Direct job creation	Public Employment services	General Govt	100%				
	7	Start-up incentives	Public Employment services	General Govt	100%				
	8	Out-of-work income support	Public Employment services	General Govt	100%				
	9	Early retirement	N/A						
Germany	1	Labour market services	Public Employment services	Social Security Fund	93%	General Govt	7%		
	2	Training	Public Employment services	Social Security Fund	98%	General Govt	1%	ESF	1%
	3	Job rotation	Public Employment services	Social Security Fund	100%				
	4	Employment Incentives	Public Employment services	Social Security Fund	95%	General Govt	5%		
	5	Supported employment and rehabilitation	Public Employment services	Social Security Fund	100%				
	6	Direct job creation	Public Employment services	Social Security Fund	100%				
	7	Start-up incentives	Public Employment services	Social Security Fund	92%	General Govt	8%		
	8	Out-of-work income support	Public Employment services	Social Security Fund	100%				
	9	Early retirement	Public Employment services	Social Security Fund	100%				
	*	Mixed	Equal share between Local Govt and Public	General Govt	97%	Socail Security Fund	3%		

Country (2008)	#	Category	Main responsible Institute	Main origin		2 nd Origin		3 rd Origin	
				Origin	%	Origin	%	Origin	%
			Employment Services						
Denmark	1	Labour market services	Equal share between Central Govt and Public Employment Services	General Govt	58%	Local Govt	42%		
	2	Training	Local Govt	General Govt	53%	Local Govt	47%		
	3	Job rotation	N/A	N/A					
	4	Employment Incentives	Equal share between Central Govt, Local Govt and Public Employment Services	General Govt	55%	Local Govt	45%		
	5	Supported employment and rehabilitation	Local Govt	Local Govt	50%	General Govt	50%		
	6	Direct job creation	N/A	N/A					
	7	Start-up incentives	N/A	N/A					
	8	Out-of-work income support	Equal share between Central Govt, Local Govt, Trade Unions and Public Employment Services	General Govt	71%	Social Security Fund	15%	Local Govt	14%
	9	Early retirement	Equal share between Central Govt and Public Employment Services	General Govt	100%				
Estonia	1	Labour market services	Public Employment services	ESF	50%	General Govt	50%		
	2	Training	Public Employment services	ESF	50%	General Govt	50%		
	3	Job rotation	N/A	N/A					
	4	Employment Incentives	Public Employment services	ESF	50%	General Govt	50%		
	5	Supported employment and rehabilitation	Public Employment services	ESF	50%	General Govt	50%		
	6	Direct job creation	N/A	N/A					
	7	Start-up incentives	Public Employment services	ESF	50%	General Govt	50%		
	8	Out-of-work income support	Social Security Institute	Social Security Fund	58%	General Govt	42%		

Country (2008)	#	Category	Main responsible Institute	Main origin		2 nd Origin		3 rd Origin	
				Origin	%	Origin	%	Origin	%
	9	Early retirement	N/A	N/A					
Greece	1	Labour market services	Public Employment services	ESF	69%	General Govt	31%		
	2	Training	Central Govt	ESF	49%	General Govt	49%	Social Security Fund	1%
	3	Job rotation	N/A	N/A					
	4	Employment Incentives	Central Govt	General Govt	52%	ESF	38%	Social Security Fund	10%
	5	Supported employment and rehabilitation	Public Employment services	General Govt	100%				
	6	Direct job creation	Central Govt	ESF	50%	General Govt	50%		
	7	Start-up incentives	Central Govt	ESF	57%	General Govt	43%		
	8	Out-of-work income support	Public Employment services	Social Security Fund	100%				
	9	Early retirement	N/A	N/A					
	*	Mixed	Public Employment services	ESF	45%	General Govt	45%	Regional Govt	10%
Spain	1	Labour market services	Public Employment services	General Govt	68%	Regional Govt	32%		
	2	Training	Public Employment services	ESF	47%	Social Security Fund	32%	General Govt	16%
	3	Job rotation	Public Employment services	General Govt	99%	Regional Govt	1%		
	4	Employment Incentives	Public Employment services	General Govt	50%	ESF	47%	Regional Govt	3%
	5	Supported employment and rehabilitation	Regional Govt	General Govt	93%	Regional Govt	7%		
	6	Direct job creation	Public Employment services	General Govt	95%	Regional Govt	5%		
	7	Start-up incentives	Public Employment services	General Govt	47%	Social Security Fund	31%	ESF	16%
	8	Out-of-work income support	Public Employment services	Social Security Fund	82%	General Govt	18%		
	9	Early retirement	Equal share between Social Security Institute and Public Employment Services	Social Security Fund	72%	General Govt	28%		

Country (2008)	#	Category	Main responsible Institute	Main origin		2 nd Origin		3 rd Origin	
				Origin	%	Origin	%	Origin	%
Finland	1	Labour market services	Public Employment services	General Govt	96%	Social Security Fund	4%		
	2	Training	Public Employment services	General Govt	34%	ESF	33%	Social Security Fund	32%
	3	Job rotation	Public Employment services	General Govt	51%	Social Security Fund	49%		
	4	Employment Incentives	Public Employment services	ESF	50%	General Govt	50%		
	5	Supported employment and rehabilitation	Social Security Institute	Social Security Fund	58%	ESF	14%		14%
	6	Direct job creation	Public Employment services	General Govt	58%	ESF	42%		
	7	Start-up incentives	Public Employment services	ESF	50%	General Govt	50%		
	8	Out-of-work income support	Equal share between Social Security Institute and Public Employment Services	General Govt	50%	Social Security Fund	37%	Local Govt	13%
	9	Early retirement	Equal share between Social Security Institute and Public Employment Services	Social Security Fund	50%	General Govt	50%		
France	1	Labour market services	Public Employment services	Social Security Fund	40%	General Govt	32%	ESF	23%
	2	Training	Regional Govt	General Govt	47%	Regional Govt	38%	Social Security Fund	14%
	3	N/A	N/A						
	4	Employment Incentives	Central Govt	General Govt	62%	ESF	18%	Social Security Fund	11%
	5	Supported employment and rehabilitation	Central Govt	General Govt	100%				
	6	Direct job creation	Local Govt	General Govt	34%	Social Security Fund	33%	Local Govt	33%
	7	Start-up incentives	Central Govt	General Govt	51%	Social Security Fund	49%		
	8	Out-of-work income support	Social Security Institute	Social Security Fund	79%	General Govt	11%	Earmarked Taxes	10%
	9	Early retirement	Central Govt	General Govt	66%	Social Security Fund	34%		
*	Mixed	Equal Share between Central Govt, Social	Social Security Fund	98%	General Govt	2%			

Country (2008)	#	Category	Main responsible Institute	Main origin		2 nd Origin		3 rd Origin	
				Origin	%	Origin	%	Origin	%
			Security Institute and the Public Employment Services						
Hungary	1	Labour market services	Public Employment services	General Govt	100%				
	2	Training	Public Employment services	General Govt	100%				
	3	Job rotation	N/A	N/A					
	4	Employment Incentives	Public Employment services	General Govt	100%				
	5	Supported employment and rehabilitation	N/A	N/A					
	6	Direct job creation	Public Employment services	General Govt	100%				
	7	Start-up incentives	Public Employment services	General Govt	100%				
	8	Out-of-work income support	Public Employment services	General Govt	100%				
	9	Early retirement	Public Employment services	General Govt	100%				
Ireland	1	Labour market services	Central Govt	General Govt	50%	ESF	50%		
	2	Training	Central Govt	General Govt	52%	ESF	30%	Earmarked Taxes	18%
	3	Job rotation	N/A	N/A					
	4	Employment Incentives	Central Govt	General Govt	50%	Earmarked Taxes	50%		
	5	Supported employment and rehabilitation	Public Employment services	General Govt	100%				
	6	Direct job creation	Public Employment services	General Govt	92%	ESF	8%		
	7	Start-up incentives	N/A	N/A					
	8	Out-of-work income support	Central Govt	Earmarked Taxes	34%	General Govt	33%	Social Security Fund	33%
	9	Early retirement	Central Govt	General Govt	100%				
Italy	1	Labour market services	Public Employment services	General Govt	73%	ESF	27%		
	2	Training	Equal share between Central and Social Security Institute	General Govt	86%	ESF	14%		
	3	Job rotation	Social Security Institute	General Govt	96%	ESF	4%		
	4	Employment Incentives	Social Security Institute	General Govt	98%	ESF	2%		

Country (2008)	#	Category	Main responsible Institute	Main origin		2 nd Origin		3 rd Origin	
				Origin	%	Origin	%	Origin	%
	5	Supported employment and rehabilitation	N/A	N/A					
	6	Direct job creation	Equal share between Central and Social Security Institute	General Govt	94%	ESF	6%		
	7	Start-up incentives	Central Govt	General Govt	85%	ESF	15%		
	8	Out-of-work income support	Social Security Institute	General Govt	52%	Earmarked Taxes	48%		
	9	Early retirement	Equal share between Central Govt, Social Security Institute and Trade Unions	Social Security Fund	50%	General Govt	50%		
	*	Mixed	Social Security Institute	General Govt	72%	Social Security Fund	28%		
	Lithuania	1	Labour market services	Public Employment services	Earmarked Taxes	38%	General Govt	38%	ESF
2		Training	Public Employment services	ESF	33%	General Govt	33%	Earmarked Taxes	33%
3		Job rotation	Public Employment services	ESF	33%	General Govt	33%	Earmarked Taxes	33%
4		Employment Incentives	Public Employment services	General Govt	36%	ESF	33%	Earmarked Taxes	27%
5		Supported employment and rehabilitation	Public Employment services	Social Security Fund	50%	General Govt	50%		
6		Direct job creation	Equal share between Local Govt and Public Employment Services	ESF	25%	Earmarked Taxes	25%	Local Govt	25%
7		Start-up incentives	Public Employment services	ESF	33%	General Govt	33%	Earmarked Taxes	33%
8		Out-of-work income support	Public Employment services	Earmarked Taxes	50%	General Govt	50%		
9		Early retirement	N/A	N/A					
Luxem- bourg	1	Labour market services	Public Employment services	Earmarked Taxes	50%	General Govt	50%		
	2	Training	Public Employment services	General Govt	50%	Earmarked Taxes	50%		
	3	Job rotation	N/A	N/A					
	4	Employment Incentives	Public Employment services	General Govt	55%	Earmarked Taxes	45%		
	5	Supported employment	Public Employment services	General Govt	84%	Earmarked Taxes	16%		

Country (2008)	#	Category	Main responsible Institute	Main origin		2 nd Origin		3 rd Origin	
				Origin	%	Origin	%	Origin	%
		and rehabilitation							
	6	Direct job creation	Central Govt	General Govt	73%	Earmarked Taxes	27%		
	7	Start-up incentives	Public Employment services	Earmarked Taxes	50%	General Govt	50%		
	8	Out-of-work income support	Public Employment services	Earmarked Taxes	50%	General Govt	50%		
	9	Early retirement	Public Employment services	Earmarked Taxes	50%	General Govt	50%		
Latvia	1	Labour market services	Public Employment services	General Govt	80%	ESF	18%	Social Security Fund	2%
	2	Training	Public Employment services	ESF	33%	General Govt	33%	Social Security Fund	33%
	3	Job rotation	N/A	N/A					
	4	Employment Incentives	Public Employment services	General Govt	67%	Social Security Fund	25%	ESF	8%
	5	Supported employment and rehabilitation	Public Employment services	General Govt	100%				
	6	Direct job creation	Public Employment services	General Govt	100%				
	7	Start-up incentives	Central Govt	General Govt	55%	ESF	45%		
	8	Out-of-work income support	Social Security Institute	Social Security Fund	96%	Earmarked Taxes	2%	General Govt	2%
	9	Early retirement	N/A	N/A					
Malta	1	Labour market services	Public Employment services	General Govt	100%				
	2	Training	Public Employment services	General Govt	94%	ESF	6%		
	3	Job rotation	N/A	N/A					
	4	Employment Incentives	Public Employment services	General Govt	88%	ESF	12%		
	5	Supported employment and rehabilitation	N/A	N/A					
	6	Direct job creation	Public Employment services	General Govt	100%				
	7	Start-up incentives	Public Employment services	General Govt	100%				
	8	Out-of-work income support	Central Govt	General Govt	100%				
	9	Early retirement	N/A	N/A					

Country (2008)	#	Category	Main responsible Institute	Main origin		2 nd Origin		3 rd Origin	
				Origin	%	Origin	%	Origin	%
Netherlands	1	Labour market services	Social Security Institute	General Govt	100%				
	2	Training	Public Employment services	General Govt	100%				
	3	Job rotation	N/A	N/A					
	4	Employment Incentives	Central Govt	General Govt	100%				
	5	Supported employment and rehabilitation	Local Govt	General Govt	53%	Local Govt	47%		
	6	Direct job creation	N/A	N/A					
	7	Start-up incentives	N/A	N/A					
	8	Out-of-work income support	Social Security Institute	General Govt	100%				
	9	Early retirement	N/A	N/A					
	*	Mixed	Local Govt	General Govt	47%	Local Govt	32%	Social Security Fund	21%
Poland	1	Labour market services	Public Employment services	Earmarked Taxes	34%	General Govt	34%	Regional Govt	31%
	2	Training	Public Employment services	Earmarked Taxes	33%	General Govt	33%	ESF	33%
	3	Job rotation	N/A	N/A					
	4	Employment Incentives	Public Employment services	Earmarked Taxes	36%	General Govt	36%	ESF	28%
	5	Supported employment and rehabilitation	Central Govt	Earmarked Taxes	48%	General Govt	48%	ESF	4%
	6	Direct job creation	Public Employment services	Earmarked Taxes	50%	General Govt	50%		
	7	Start-up incentives	Public Employment services	Earmarked Taxes	34%	General Govt	34%	ESF	32%
	8	Out-of-work income support	Public Employment services	Earmarked Taxes	50%	General Govt	50%		
	9	Early retirement	Social Security Institute	General Govt	100%				
Portugal	1	Labour market services	Public Employment services	Regional Govt	50%	General Govt	50%		
	2	Training	Public Employment services	ESF	39%	Regional Govt	23%	Social Security Fund	22%
	3	Job rotation	N/A	N/A					
	4	Employment Incentives	Social Security Institute	Social Security Fund	87%	ESF	6%	General Govt	6%

Country (2008)	#	Category	Main responsible Institute	Main origin		2 nd Origin		3 rd Origin	
				Origin	%	Origin	%	Origin	%
	5	Supported employment and rehabilitation	Public Employment services	ESF	50%	Social Security Fund	50%		
	6	Direct job creation	Public Employment services	ESF	49%	Social Security Fund	47%	Regional Govt	4%
	7	Start-up incentives	Equal share between Regional Govt, Social Security and Public Employment Services	ESF	34%	Social Security Fund	34%	Regional Govt	32%
	8	Out-of-work income support	Social Security Institute	Social Security Fund	100%				
	9	Early retirement	Social Security Institute	Social Security Fund	100%				
	*	Mixed	Equal share between Regional Govt, and Public Employment Services	ESF	37%	Regional Govt	35%	Social Security Fund	28%
Romania	1	Labour market services	Public Employment services	General Govt	98%	Social Security Fund	2%		
	2	Training	Public Employment services	Social Security Fund	100%				
	3	Job rotation	N/A	N/A					
	4	Employment Incentives	Public Employment services	Social Security Fund	100%				
	5	Supported employment and rehabilitation	N/A	N/A					
	6	Direct job creation	Public Employment services	Social Security Fund	56%	Local Govt	44%		
	7	Start-up incentives	Public Employment services	Social Security Fund	100%				
	8	Out-of-work income support	Public Employment services	Social Security Fund	100%				
	9	Early retirement	N/A	N/A					

Country (2008)	#	Category	Main responsible Institute	Main origin		2 nd Origin		3 rd Origin	
				Origin	%	Origin	%	Origin	%
Sweden	1	Labour market services	Public Employment services	General Govt	100%				
	2	Training	Public Employment services	General Govt	100%				
	3	Job rotation	N/A	N/A					
	4	Employment Incentives	Public Employment services	General Govt	100%				
	5	Supported employment and rehabilitation	Central Govt	General Govt	100%				
	6	Direct job creation	N/A	N/A					
	7	Start-up incentives	Public Employment services	General Govt	100%				
	8	Out-of-work income support	Trade Unions	Social Security Fund	51%	General Govt	49%		
	9	Early retirement	N/A	N/A					
	*	Mixed	Public Employment services	General Govt	100%				
Slovenia	1	Labour market services	Public Employment services	Earmarked Taxes	50%	General Govt	50%		
	2	Training	Public Employment services	General Govt	30%	Earmarked Taxes	25%	ESF	25%
	3	Job rotation	N/A	N/A					
	4	Employment Incentives	Public Employment services	Earmarked Taxes	38%	General Govt	38%	ESF	24%
	5	Supported employment and rehabilitation	N/A	N/A					
	6	Direct job creation	Public Employment services	Earmarked Taxes	50%	General Govt	50%		
	7	Start-up incentives	Public Employment services	Earmarked Taxes	33%	General Govt	33%	ESF	33%
	8	Out-of-work income support	Public Employment services	Earmarked Taxes	33%	General Govt	33%	Social Security Fund	33%
	9	Early retirement	N/A	N/A					
Slovakia	1	Labour market services	Central Govt	General Govt	50%	ESF	50%		
	2	Training	Central Govt	ESF	50%	General Govt	50%		
	3	Job rotation	N/A	N/A					
	4	Employment Incentives	Central Govt	General Govt	50%	ESF	50%		
	5	Supported employment and rehabilitation	Central Govt	ESF	50%	General Govt	50%		
	6	Direct job creation	Central Govt	ESF	50%	General Govt	50%		

Country (2008)	#	Category	Main responsible Institute	Main origin		2 nd Origin		3 rd Origin	
				Origin	%	Origin	%	Origin	%
	7	Start-up incentives	Central Govt	ESF	50%	General Govt	50%		
	8	Out-of-work income support	Social Security Institute	Social Security Fund	100%				
	9	Early retirement	Social Security Institute	Social Security Fund	100%				
United Kingdom	1	Labour market services	Public Employment services	General Govt	71%	Earmarked Taxes	29%		
	2	Training	Regional Govt	Regional Govt	100%				
	3	Job rotation	N/A	N/A					
	4	Employment Incentives	Central Govt	General Govt	100%				
	5	Supported employment and rehabilitation	Central Govt	General Govt	100%				
	6	Direct job creation	N/A	N/A					
	7	Start-up incentives	N/A	N/A					
	8	Out-of-work income support	Equal share between Central Govt and Public Employment Services	Social Security Fund	50%	General Govt	50%		
	9	Early retirement	N/A	N/A					
*	Mixed	Public Employment Services	General Govt	58%	Earmarked Taxes	42%			

Annex E – Literature List chapter 4

Out-of-work income support (Austria, Hungary, Spain, Sweden, UK)

Austria:

- Böheim, René and Andrea Weber, 2011, “The Effects of Marginal Employment on Subsequent Labour Market Outcomes”, *German Economic Review*, 12(2), 165–181;
- Card, David, Raj Chetty and Andrea Weber, 2007, „The spike at benefit exhaustion: leaving the unemployment system or starting a new job?“, *American Economic Review Papers and Proceedings*, vol. 97 (2), 113–8;
- Lalive, Rafael, 2007, “Unemployment benefits, unemployment duration, and post-unemployment jobs: A regression discontinuity approach”, *American Economic Review*;
- Lalive, Rafael, 2008, “How do extended benefits affect unemployment duration? A regression discontinuity approach”, *Journal of Econometrics*, vol 142(2), 785—806;
- Lalive, Rafael and Josef Zweimüller, 2004, „Benefit entitlement and unemployment duration: The role of policy endogeneity“, *Journal of Public Economics*, Volume 88, Issue 12, 2587-2616;
- Lalive, Rafael, Jan van Ours and Josef Zweimüller, 2006, “How Changes in Financial Incentives Affect the Duration of Unemployment”, *Review of Economic Studies*, vol. 73(4), 1009-1038;
- Winter-Ebmer, Rudolf, 1998, “Potential Unemployment Benefit Duration and Spell Length: Lessons from a Quasi-Experiment in Austria“, *Oxford Bulletin of Economics and Statistics*;
- Winter-Ebmer, Rudolf, 2003, „Benefit duration and unemployment entry: A quasi-experiment in Austria“, *European Economic Review*, Vol. 47, 259-273.

Hungary:

- Galasi, Péter and Nagy, Gyula (2002a): Járadékjogosultsági időtartam és elhelyezkedés, [Duration of benefit entitlement and reemployment] *Közgazdasági Szemle*, February 2002, pp 126-142;
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- Köllő János (2001): A járadékos munkanélküliek álláskilátásai 1994 és 2001 tavaszán [Job prospects of the insured unemployed in the spring of 1994 and 2001] *Budapest Working Papers on the Labour Market* 2001/7 <http://www.econ.core.hu/doc/bwp/bwp/bwp0107.pdf>;
- Micklewright, J. and Nagy, Gy. (1995): Unemployment Insurance and Incentives in Hungary: Preliminary Evidence. CEPR Discussion Paper 1118, and in: Newbery, D (ed.): *Tax and Benefit Reform in Central and Eastern Europe*, CEPR, London;
- Wolff, Joachim (2001) The Hungarian unemployment insurance benefit system and incentives to return to work, *LMU IS Discussion Paper No. 253* http://epub.ub.uni-muenchen.de/1633/1/paper_253.pdf.

Spain:

- Gonzalo, M. T. (2002), A new look at the UI effect on transitions from unemployment into wage employment in Spain: The limited duration of the UI benefits entitlement, *Applied Economics* 34 (17), pp. 2177-2187;

- Jenkins, S. P., García-Serrano, C. (2004), The relationship between unemployment benefits and re-employment probabilities: Evidence from Spain, *Oxford Bulletin of Economics and Statistics*, 66 (2), pp. 239-260.

Sweden:

- Carling, K., B. Holmlund, & A. Vejsiu (2001), Do Benefit Cuts Boost Job Finding? Swedish Evidence from the 1990s, *Economic Journal*, 111;
- Fredriksson, P. & Söderström, M (2008), Do Unemployment Benefits Increase Unemployment? New Evidence on an Old Question. IZA DP No. 3570.

UK

Work Focused Interviews (WFIs)

Description: during the early 2000s, a requirement was gradually introduced that all lone parents on welfare benefits had to attend period interviews at a Jobcentre Plus office, under the threat of losing entitlement to welfare benefits. The evaluations made use of the gradual roll-out and intensifying of these requirements.

References:

1. Knight, G. and Lissenburgh, S., (2004), "Evaluation of Lone Parent Work Focused Interviews: Final findings from administrative data analysis", DWP Report W182; http://eprints.wmin.ac.uk/617/1/Knight_Lissenburgh_2004_DWP_W182_final.pdf;
2. Knight, G. and Lissenburgh, S. (2005), "Evaluation of the extension to Lone Parent WFI eligibility: administrative data analysis", DWP Research Report No. 237; <http://research.dwp.gov.uk/asd/asd5/rports2005-2006/rrep237.pdf>;
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5. Cebulla, A. and G. Flore, with D. Greenberg (2008), "The New Deal for Lone Parents, Lone Parent Work Focused Interviews and Working Families' Tax Credit: A review of impacts", DWP Research Report, No. 484; <http://research.dwp.gov.uk/asd/asd5/rports2007-2008/rrep484.pdf>.

Jobseekers Allowance reforms

Description: in 1996, the insurance benefit known as Unemployment Benefit was merged with the means-tested social assistance benefit known as Income Support to create a single benefit, Jobseekers Allowance with tougher conditions on claimants.

References:

6. Manning, A. (2009) "You can't always get what you want: The impact of the UK Jobseeker's Allowance", *Labour Economics*, Vol. 16, No. 3, pp. 239-250. [Also as CEP discussion paper 0697]. http://econ.lse.ac.uk/~amanning/work/manning_jsa.pdf;
7. Petrongolo, B. (2009), The long-term effects of job search requirements: Evidence from the UK JSA Reform <http://wpeg.group.shef.ac.uk/Archive/documents/barbara.pdf> and also Barbara Petrongolo, B. (2009), "The long-term effects of job search requirements: Evidence from the UK JSA reform", *Journal of Public Economics*, Vol. 93, No. 11-12, pp. 1234-125.

General Anglo-Saxon literature on unemployment benefits

Atkinson, A.B. and J. Micklewright (1991), Unemployment Compensation and Labor Market Transitions: A Critical Review, *Journal of Economic Literature*, vol. 29, no. 4, 1679-1727.

Katz, L., and B. D. Meyer (1990): The Impact of the Potential Duration of Unemployment Benefits on the Duration of Unemployment, *Journal of Public Economics*, 41: 45-72.

Lancaster, T. and S. Nickell (1980), The Analysis of Re-employment Probabilities for the Unemployed, *Journal of the Royal Statistical Society. Series A (General)*, volume 143, issue 2, 141-165.

Layte, R. and T. Callan (2001), Unemployment, Welfare Benefits and the Financial Incentive to Work, *The Economic and Social Review*, Vol. 32, No. 2, July, 2001, pp. 103-129

Narendranathan, W., S. Nickell and J. Stern (1985), Unemployment Benefits Revisited, *Econ. J.*, 95(378), pp. 307-29.

Peters, M., R. Dorenbos, M. van der Ende, M. Versantvoort and M. Arents (2004), Benefit Systems and their interaction with active labour market policies, *Ecorys: Rotterdam*, 17 February 2004.

Wadsworth, J. (1990), Unemployment Benefits and Search Effort in the UK Labour Market, *Economica* 58, pages 17-34

Early Retirement (Italy, The Netherlands)

Italy:

1. Angelini, Viola and Agar Brugiavini and Guglielmo Weber, 2009. "Ageing and unused capacity in Europe: is there an early retirement trap?," *Economic Policy*, CEPR, CES, MSH, vol. 24, pages 463-508, 07;
2. Boeri, Tito and Agar Brugiavini, 2008. "Pension Reforms and Women Retirement Plans," *IZA Discussion Papers 3821*, Institute for the Study of Labour (IZA);
3. Agar Brugiavini and Franco Peracchi, 2010. "Youth Unemployment and Retirement of the Elderly: The Case of Italy," *NBER Chapters*, in: *Social Security Programs and Retirement around the World: The Relationship to Youth Employment*, pages 167-215, National Bureau of Economic Research, Inc.

Netherlands:

Berkhout, P.H.G., E.S. Mot and A.H. Paape (1994), Arbeidsmarkteffecten van afschaffing van de VUT (Labour Market Effects of abolishing the VUT), *OSA Working Paper W117*.

Bonenkamp, J. and E. Westerhout (2010), Intergenerational risk sharing and labour supply in collective funded pension schemes with defined benefits. *CPB Discussion Paper no. 151*, June 2010.

De Hek, P. and F. van Erp (2009), Analysing Labour Supply of Elderly People, *CPB document no. 179*, February 2009.

Euwals, R, D. van Vuuren and R. Wolthoff (2005), Early Retirement Behaviour in the Netherlands, *CPB Discussion Paper no. 52*, December 2005.

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Nelissen, J.H.M. (2001), Het effect van wijzigingen in vervroegde uittredingsregelingen op de arbeidsparticipatie van oudere werknemers (The Effect of Changes in Early Retirement Schemes on the Labour Participation of Older Workers), CentER Applied Research, May 2001.

Labour Market Services (Austria, The Netherlands, UK)

Austria:

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- Weber, Andrea and Helmut Hofer, 2003, "Active job-search programs a promising tool? A microeconomic evaluation for Austria", IHS working paper 131, Institute for Advanced Studies, Vienna;
- Weber, Andrea and Helmut Hofer, 2004, "Employment Effects of Early Interventions on Job Search Programs", IZA Discussion Paper 1076;
- Weber, Andrea. 2008, "Individual Incentives in Program Participation: Splitting up the Process in Assignment and Enrolment", IZA Discussion Paper 3404.

Netherlands:

- Blank, J. et al. (2006), Onzekerheid over doelmatigheid (Uncertainty about effectiveness), Ecorys: Rotterdam;
- Commission Buurmeijer (1993), Enquête naar het functioneren van de organen belast met de uitvoering van de sociale zekerheidswetten (Inquiry into the performance of organisations in charge of the implementation of the social security acts), Dutch Parliament, 22730, nr. 7-10;
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- Kok, L. and A. Houkes (2011), Gemeentelijk re-integratiebeleid vergeleken (Comparison of activation between municipalities), SEO: Amsterdam;
- Koning, P. (2009), Contracting Welfare-to-Work Services: Use and Usefulness, CPB Discussion Paper no.135;
- Koning, P. and C.J. Heinrich (2009), Cream-skimming, Parking and other Intended and Unintended Effects of Performance-Based Contracting in Social Welfare Services, CPB Discussion Paper no. 134;
- Koning, P. (2006), Measuring the Effectiveness of Public Employment Service (PES) Workers, CPB Discussion Paper no. 73;
- OECD (1967), Manpower and Social Policy in the Netherlands, Paris;
- Sol, E. (2000), Arbeidsvoorzieningsbeleid in Nederland (Public Employment Services in the Netherlands), Sdu: The Hague;
- Van der Heul, H. (2006), Vaststelling en evaluatie van de effectiviteit van re-integratiemaatregelen voor WW cliënten (Assessment and evaluation of the effectiveness of activation measures for unemployment beneficiaries), UWV: Amsterdam;
- Van Leuvensteijn, M. and P. Koning (2000), Duration Dependence in Unemployment Insurance and Social Assistance: Consequences of Profiling for the Unemployed, CPB Research Memorandum 163;
- Van den Berg, G., B. van der Klaauw, Counselling and Monitoring of Unemployed Workers: Theory and Evidence from a Controlled Social Experiment (2006), International Economic Review, 47, 895-936.

UK

New Deal for Young People (NDYP)

Description: Programme targeted at the 18-24 years old, unemployed for six months. It offers job search assistance and basic skill training.

References:

1. Riley, R. and Young, G. (2000), 'The New Deal for Young People: Implications for Employment and the Public Finances', NIESR, Research and Development Report ESR62, Sheffield: Employment Service;
http://www.niesr.ac.uk/pdf/140306_123853.pdf;
2. White, M. and Riley, R. (2002), 'Findings from the Macro evaluation of the New Deal for Young People', Department for Work and Pensions, Research Report No. 168;
<http://statistics.dwp.gov.uk/asd/asd5/rrep168.pdf>;
3. Blundell, R., Costa-Dias, M., Meghir, C. and van Reenen, J. (2004), 'Evaluating the Employment Impact of a Mandatory Job Search Program', Journal of the European Economic Association, Vol. 2, No. 4, pp. 569-606. Also as IFS Working Papers WP01/20;
<http://www.ifs.org.uk/publications/1734>;
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<http://www.ifs.org.uk/publications/3346>;
6. Dorsett, R. (2006), "The new deal for young people: effect on the labour market status of young men", Labour Economics, Vol. 13, pp. 405-422;
7. Beale, I., Bloss, C. and Thomas, A. (2008), 'The longer-term impact of the New Deal for Young People', DWP Working Paper No. 23;
<http://statistics.dwp.gov.uk/asd/asd5/WP23.pdf>.

Evaluation: The evaluations have been carried out to measure short-term impact as well as longer term effects using difference in differences, propensity score matching and regression discontinuity design methodologies.

New Deal 25 Plus (ND25+)

Description: New Deal 25 plus (ND25+) provides job search assistance, training opportunities and work placements to people aged between 25 and the State Pension age, who have been claiming Jobseeker's Allowance for 18 out of 21 months.

References:

8. Wilkinson, D. (2003), 'New Deal for people aged 25 and over: A Synthesis Report', NIESR, Research and Development Report ESR62, Sheffield: Employment Service;
<http://webarchive.nationalarchives.gov.uk/+/http://www.dwp.gov.uk/jad/2003/161rep.pdf>;
9. Dorsett, R., Smeaton, D., (2008), "Mandating Intensive Activity Period for jobseekers aged 50+: final report of the quantitative evaluation", Department for Work and Pensions Research Report No. 500;
<http://research.dwp.gov.uk/asd/asd5/rports2007-2008/rrep500.pdf>.

New Deal for Partners (NDP)

Description: New Deal for Partners provides job search assistance, training opportunities and work placements to couples looking for work.

References:

10. Dorsett, R., Haile, G. and Speckesser, S., (2006), "Work-focused Interviews for Partners (WFIP) and enhanced New Deal for Partners (NDP): quantitative impact assessment", Department for Work and Pensions Research Report No. 352;
<http://research.dwp.gov.uk/asd/asd5/rports2005-2006/rrep352.pdf>;
11. Nick Coleman and Ken Seeds, (2007), "Work Focused Interviews for Partners and enhanced New Deal for Partners evaluation: Synthesis of findings", Department for Work and Pensions Research Report No. 417;
<http://research.dwp.gov.uk/asd/asd5/rports2007-2008/rrep417.pdf>.

Joint claim for JSA

Description: Unemployed couples without dependent children were both required to make a joint claim. This involves both partners in meeting the labour market requirements of claiming unemployment benefit (i.e. Job Seekers Allowance JSA), including actively seeking work.

References:

12. Dorsett, R., (2005), "Joint Claims for JSA Extension – quantitative evaluation of labour market effects", Department for Work and Pensions working paper No. 22;
<http://research.dwp.gov.uk/asd/asd5/WP22.pdf>;
13. Bewley, H., Dorsett, R., Thomas, A., (2005), "Joint claims for JSA evaluation - synthesis of findings", Department for Work and Pensions, Research Report No. 235;
<http://research.dwp.gov.uk/asd/asd5/rports2005-2006/rrep235.pdf>.

Evaluation: The research used difference-in-differences analysis of administrative and survey data. Problems with administrative computer systems resulted in considerable problems with the administrative database, compromising the robustness of the impact estimates.

Pathways to work

Description: Programme piloted between 2003 and 2008 aiming at providing help and incentives to claimants of incapacity benefits. It consists in mandatory work focused interviews, voluntary programmes designed to help return to work or simply everyday activities and financial incentives to return to work.

References:

14. Adam, S., Emmerson, C., Frayne, C. and Goodman, A. (2006), 'Early quantitative evidence on the impact of the Pathways to Work pilots', Department for Work and Pensions, Research Report No. 354;
<http://research.dwp.gov.uk/asd/asd5/rports2005-2006/rrep354.pdf>;
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<http://research.dwp.gov.uk/asd/asd5/rports2007-2008/rrep435.pdf>;
16. Adam, S., Bozio, A., Emmerson, C., Greenberg D. and Knight, G. (2008), 'A cost-benefit analysis of Pathways to Work for new and repeat incapacity benefits claimants', Department for Work and Pensions, Research Report No. 498;
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20. Bewley, H., Dorsett, R. and Salis, S. (2009), 'The impact of Pathways to Work on work and self-reported health in the April 2006 expansion areas', Department for Work and Pensions, Research Report No. 601;
<http://research.dwp.gov.uk/asd/asd5/rports2009-2010/rrep601.pdf>;
21. Adam, S., Bozio, A., and Emmerson, C. (2009), 'Can we estimate the impact of the Choices package in Pathways to Work?', Department for Work and Pensions Working Paper No. 60;
<http://research.dwp.gov.uk/asd/asd5/WP60.pdf>;
22. Bewley, H. and Dorsett, R. (2009), 'The impact of Pathways to Work on benefit receipt for the under 25s', Department for Work and Pensions Working Paper No. 65;
<http://research.dwp.gov.uk/asd/asd5/WP65.pdf>.

Evaluation: The programme was piloted in seven areas of the country and surveys were collected before and after the implementation of the programme in these treatment areas as well as in control areas. An extensive cost and benefit analysis has been carried out using data from the pilot areas and a micro-simulation model of the tax and benefit system of the UK. The expansion of the programme to other groups and other regions has also been quantitatively evaluated.

Employment Retention and Advancement (ERA)

Description: ERA is a research demonstration programme aiming at improving the prospects of low paid workers to progress in their employment. It combined enhanced personal adviser services, a financial incentive to take and retain full-time employment, and training subsidies.

References:

23. Hoggart, L., Campbell-Barr, V., Ray, K. and Vegeris, S. (2007), 'Staying in work and moving up: Evidence from the UK Employment Retention and Advancement (ERA) demonstration, Department for Work and Pensions, Research Report No. 381;
<http://research.dwp.gov.uk/asd/asd5/rports2005-2006/rrep381.pdf>;
24. Dorsett, R., Campbell-Barr, V., Hamilton, G., Hoggart, L., Marsh, A., Miller, C., Phillips, J., Ray, K., and J. Riccio (2007), 'Implementation and first year impacts of the UK Employment Retention and Advancement (ERA) demonstration', Department for Work and Pensions Research Report No. 412;
<http://research.dwp.gov.uk/asd/asd5/rports2007-2008/rrep412.pdf>;
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26. Bewley, H., Dorsett, R., Riccio, J. A., Cambell-Barr, V., Hamilton, G. Hoggart, L., Marsh, A., Miller, C., Ray, K., and Vegeris (2008), 'Implementation and second-year impacts for lone parents in the UK Employment Retention and Advancement (ERA) demonstration', Department for Work and Pensions, Research Report No. 489;
<http://research.dwp.gov.uk/asd/asd5/rports2007-2008/rrep489.pdf>;
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<http://research.dwp.gov.uk/asd/asd5/WP96.pdf>.

Evaluation: This programme is a research demonstration, i.e. not carried out nationwide, but designed to help understand the dynamic effects of these type of support.

Employment Zones (EZs)

Description: In EZs, the delivery of all welfare-to-work programmes were given to private contractors. They were piloted in certain parts of the UK and the evaluation made use of non-pilot areas as comparison areas.

Reference:

30. Griffiths, R. and Durkin, S. (2007), "Synthesis of Evidence on Employment Zones", DWP Research Report No. 449;
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http://research.dwp.gov.uk/asd/asd5/working_age/wa2003/176rep.pdf;
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Working Neighbourhoods Pilot (WNP)

Description: The WNP was established in April 2004 to test new approaches to offering intensive support to help people to find and remain in work. The pilot was targeted towards people who are without work, including claimants of Jobseeker's Allowance (JSA), Income Support (IS), Incapacity Benefit (IB), partners of claimants and workless non-claimants. The pilot areas were selected because of very high levels of worklessness and deprivation.

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ONE

Description: ONE was an early attempt to combine benefit offices with employment offices. It was piloted in certain parts of the UK and the evaluation made us of non-pilot areas as comparison areas.

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32. Green, H., Marsh, A., Connolly, H., Payne, J., Kasparova, D., Kirby S. and Riley, R. (2003), "Final Effects of ONE", DWP Research Report No. 183;

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Jobfinder

Description: Another programme from 1997 which was compulsory for the long-term unemployed. Participants received guidance and practical jobsearch assistance from caseworkers over up to 7 interviews.

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"Project Work" Pilots

Description: Project Work started in April 1996. It was a compulsory for the long-term unemployed which offered intensive guidance and practical jobsearch assistance from caseworkers, a subsidy for employers. Those who had not found work after 13 weeks had to take up work experience placements. (Authors' note: it was a precursor to the New Deal programmes announced by the next government).

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1-2-1/Workwise

Description: These were piloted during the mid 1990s, and were compulsory for the long-term unemployed. Participants received guidance and practical jobsearch assistance from caseworkers over a 4 week period.

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IZA Discussion Paper 2885, 2007;
3. Aderonke Osikominu
Quick Job Entry or Long-Term Human Capital Development? The Dynamic Effects of Alternative Training Schemes
IZA Discussion Paper 4638, 2009;

4. Bernd Fitzenberger, Aderonke Osikominu, and Marie Paul
The Heterogeneous Effects of Training Incidence and Duration on Labour Market Transitions
ZEW Discussion Paper 10077, 2010;
5. Bernd Fitzenberger and Robert Völter
Long-Run Effects of Training Programs for the Unemployed in East Germany
Labour Economics 14, 730-755, 2007;
6. Gesine Stephan and André Pahnke
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IZA Discussion Paper 3767, 2008;
7. Ulf Rinne, Marc Schneider and Arne Uhlendorff
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8. Michael Lechner and Conny Wunsch,
Are training programs more effective when unemployment is high?
Journal of Labour Economics Journal of labour economics 27 S.653-692, 2007;
9. Sarah Bernhard and Thomas Kruppe
Effectiveness of further vocational training in Germany: Empirical findings for means-tested unemployment benefit recipients, mimeo, 2010;
10. Bernd Fitzenberger and Stefan Speckesser
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Empirical Economics 32, 529-573, 2007;
11. Bernd Fitzenberger, Aderonke, Osikominu and Robert Völter
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12. Rainer Hujer and Stephan Thomsen.
The effects of vocational training programmes on the duration of unemployment in Eastern Germany,
Allgemeines Statistisches Archiv 90, 299-322, 2006;
13. Michael Lechner, Ruth Miquel and Conny Wunsch
The Curse and Blessing of Training the Unemployed in a Changing Economy: The Case of East Germany after Unification,
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Annex F – Tabulated findings of effectiveness

Out-of-work income support (Austria, Hungary, Spain, Sweden, UK)

Austria

Source	Type	Target group	Data (*)	Size	Time	Method	Success criteria	Results	Internal validity	External validity	ATET	Subst Effect	Cost-benefit
Böheim, Weber 2011	Job subsidy.	All un-employed.	UI inflow	193,000	Mar-Aug 1999	Propensity score matching.	Days employed; wages.	Negative.	+	+		No	No
Card, Chetty, Weber 2007	Benefit exhaustion effects.	UI recipients.	UI inflow	1,380,000	1981-2001	Hazard rate models.	Re-employment.	Small exhaustion effects.	++	++		No	No
Lalive 2007	Extension of UI entitlement.	Older UI recipients.	UI inflow	40,000	Aug 89-Jul 91	Regression discontinuity.	Unempl. Duration; job start; wages.	Negative.	++	++		No	No
Lalive 2008	Extension of UI entitlement.	Older UI recipients.	UI inflow	9,700	1985-1995	Regression discontinuity.	Unempl. Duration.	Negative.	++	++		No	No
Lalive Zweimüller 2004	Extension of UI entitlement.	Older UI recipients.	UI inflow	312,000	1986-1995	Difference-in-difference.	Re-employment.	Negative.	++	+		No	No
Lalive Van Ours Zweimüller 2006	UI entitlement; UI benefits.	UI claimants 40+; UI claimants total.	UI inflow	225,000	Aug 87-July 91	Hazard models.	Unempl. Duration.	Negative.	++	+		No	No
Winter-Ebmer 1998	UI duration.	Older UI recipients.	2% sample of inflow	77,000	1986-1991	Diff. in diff., hazard models.	Unempl. Duration.	Negative.	++	+		No	No
Winter-Ebmer 2003	UI entry.	Older UI recipients.	6 cross-sections	32,000	May 86-91	Diff. in diff., probit.	Unempl. Entry.	Negative.	++	+		No	No

Hungary

Source	Type	Target group	Data	Size	Time	Method	Success criteria	Results	Internal validity	Extern validity	ATET	Subst Effect	Cost-benefit
Galasi Nagy 2002a	New UI claimants after 1 Feb 2000 are entitled to max 25% less benefit duration.	UI recipients.	UI entrants 1 Jan-15 Mar 2000, excluded voluntary quits and severance pay recipients.	31,031 control 27,947 treated	9 month after entry	Kaplan Meier survival function by gender, 4 subgroups of prior empl. spell	Exit to job	No effect – some subgroups have higher exit rates in control group, maybe due to recall workers in January.	0	0	Yes	-	No
Bódis Micklewright Nagy 2004	Experiment: 4 visits to PES to ask about job search in 3 months.	Entered UI register, entitled to 75-179 days of UI benefit.	Interview surveys and PES registers Entrants 26 May-26 Jul 2003.	479 W age 29-; 615 W age 30+; 1,037 M.	4-6 month after entry.	Proportional hazard of exit to job or ALMP, treatment dummy, personal chars, local unempl. Rate.	Exit to job.	Hazard ratio for women over 29 is 1.43 (43 % over control group's).	++	+ (short spell)	Yes	No	No
Köllő – Nagy (1996)	Effect of UI on wage after exit to job.	subgroups : (a) job losers <181 day in UI; (b) Job losers	interview survey of reemployed + PES register of UI recipients.	(a) 3,389 (b) 3,092; (c) 383 (d) 2,106.	Mar 20-Apr 20, 1994.	OLS on $\log(w_1/w_0)$ – $\Delta \log W$, with individual + job chars, local unempl. Rate.	Wage gain above the average gain for UI pool in the same period.	Wage loss 0% after 0-3 months UI; -5% after 6 months UI and -10% after 12	+	0 (high unempl.)	Yes	Not relevant	No

Source	Type	Target group	Data	Size	Time	Method	Success criteria	Results	Internal validity	Extern validity	ATET	Subst Effect	Cost-benefit
		180+ day UI (c) voluntary quits; (d) recalled workers.						months UI.					
Köllö 2001	Likelihood of finding job before exhaustion of benefit.	UI recipients.	interview survey of reemployed (+ PES register of UI recipients); exits from UI pool 18 March - 7 April 2001.	8,339 out of 105,924 incl. those exhausting UI benefit and recalled workers.	9-12 month.	Multinomial logit (1) stays in UI (2) exit to new job (3) exit to old job, (4) exit to unknown job, controls for indiv. chars, past empl. And unempl. Experience.	Exit to job before exhausting UI benefit.	Upper secondary & graduates are 50% more likely to exit before exhaustion if max <50 UI.	+	+	Yes	No	No
Micklewright Nagy 1995	Since 1 Jan 1993, first phase of UI is 1/4 shorter but benefit is 75 vs 70% of wage.	UI recipients.	UI register new entrants Dec 92 + Jan 93; Excl. voluntary quits and UI claims > 2 month after job loss.	50,441 control 30,270 treated.	3-19 month after entry into UI.	Kaplan Meier survival functions and hazards, by sex and four subgroups of prior employment spell.	Exit to job.	No effect; Exit rates were higher in January for some subgroups, likely due to recall workers.	0	0	Yes	-	No
Wolff 2001-I	As above.	UI recipients.	As M&N but also excl. recalled	13,121 control 10,373	As above.	As above.	Exit to job.	No effect.	+	0 (high unempl)	Yes	-	No

Source	Type	Target group	Data	Size	Time	Method	Success criteria	Results	Internal validity	Extern validity	ATET	Subst Effect	Cost-benefit
			workers.	treated.									
Wolff 2001-II	As above.	UI recipients.	As M&N but also excl. older worker.	6,162 control 5,047 treated.	As above.	As above.	Exit to job.	No robust effect for men, for women exits are 53% more likely in the last 30 of 270 days; For women <30 years elasticity wrt UI benefit is -0.35 and wrt wages +0.31.	+	0 (high unempl)	Yes	No	No
Firle-Szabó 2007-I	Social benefit.	Exhausted UI.	Labour Force Survey, received UI or SB one quarter and not in the next.	1,023 men 607 women.	2001-I to 2004-IV.	Jenkins logit and estimates of alternative specifications controls for past u, family income and local unempl.rate.	Exit to job.	SB prolongs duration by 7 quarters and reduces probability of job exit 6% (men and women).	0	0	Yes	No	No
Firle-Szabó	Social benefit	Exhausted UI	Labour Force Survey, non-	22,153 men	2001-I to 2004-IV	Probit, poor controls as above	Exit to job	Reduces probability	-	-	Yes	No	No

Source	Type	Target group	Data	Size	Time	Method	Success criteria	Results	Internal validity	Extern validity	ATET	Subst Effect	Cost-benefit
2007-I			employed excl. sick, disabled and carers, aged 18-62.	22,087 women.				of job exit by 7% (men) and 5% (women).					
Galasi Nagy 2002b	Change in social benefit rules in May 2000	Exhausted UI	Retrospective interview survey of a sample taken from PES register exhausted UI.	Apr 11,259 men 8,768 women May 14,314 men 12,372 women.	7-8 month after April/May 2000.	Jenkins logit for 2-week spells, controls for indiv. char, local u; Benefit= actual or expected benefit = amount x P(takeup), estimated in a separate logit.	Exit to job.	Effects on odds ratio April/May: -4.3% / -7.0% men; -4.3% / -6.2% women; assumed to be constant during the observation period.	+	+	Yes	No	No
Micklewright Nagy 1998	Social benefit.	Exhausted UI.	March-April 1994 UI inflow; + interviews with those who exhausted UI.	4,661 response rate was almost 90%.	3-4 month after exhausting UI.	Jenkins logit by sex, estimate coeff for expected SB. Controls for individual/household char. and local u. no attempt to control for selection bias (variation in unobserved char).	Exit to job.	Effects on odds ratio (logit) -0.144 (m); -0.157 (w) conditional on survival past 1st week after exhausting UI.	+	0 (high unempl)	Yes	No	No

*the Hungarian LFS is a rotating panel where an individual may be included for a maximum of 6 consecutive quarters.

Spain

Source	Type	Target group	Data	Size	Time	Method	Success criteria	Results	Internal validity	External validity	ATET	Subst Effect	Cost-benefit
Gonzalo 2002	UI benefits.	Unemployed men 25-54 years from private sector.	Spanish LFS.	4,942 spells.	1989-I to 1991-IV.	Duration model.	Exit to job.	See text.	+	+	No	No	No
Jenkins García-Serrano 2004	UI and UA benefits.	Men 20-59 years old fully unemployed.	PES.	329,947 spells.	1987-1991.	Logistic hazard model.	Exit to job up to 2 years after start UI.	See text.	+	+	No	No	No

Sweden

Source	Type	Target group	Data	Size	Time	Method	Success criteria	Results	Internal validity	Extern validity	ATET	Subst Effect	Cost-benefit
Carling et al. 2001	1996 reduction of replacement rate from 80 to 75%.	Insured unemployed.	LINDA extended by ANDEL, AKSTAT, IoF.	18,429 persons.	Jul 94-Jun 96.	Diff-in-diff.	Decrease in unemployment duration.	Elasticity 1.6%.	IFAU standard.	+	...	...	No
Fredriksson and Söderström 2008	Several changes in the cap in UI during 1974-2002.	Regional unemployt.	LINDA, LFS + regional ALMP rates from Labour Market Board.	100,000 persons per year and 24 regions.	1974-2002.	Panel data estimates, controls for endogeneity using predicted wages.	Decrease in regional unemployment.	Elasticity 5%.	IFAU standard.	?	...	...	No

UK

Source	Policy or reform	Counterfactual policy or environment	Outcome	Impact – short-run	Baseline: short-run	Impact: long-run	Baseline: long-run	Population	Comparison group
Cebulla et al., 2008 (Table 1)	New Deal for Lone Parents.	<i>Income support</i> regime for lone parents in 2000.	Exits from welfare.	+ 1.7 ppts (9 months after joining programme).	Not given.	+ 1.4 ppts (24 months after joining programme).	Not given.	All lone parents receiving <i>income support</i> .	NDLP non-participants (using matching).
Cebulla et al., 2008 (Table 1)	Work Focussed Interviews for Lone Parents.	<i>Income support</i> regime for lone parents in 2001.	Exits from welfare.	+ 1.13 ppts (9 months after WFI).	18.77 (“gross exit rate”).	0.79 ppts (12 months after WFI).	25.60 (“gross exit rate”).	All lone parents receiving <i>income support</i> , youngest child aged 13+.	Lone parents with younger children (and DiD).
Cebulla et al., 2008 (Table 1)	Work Focussed Interviews for Lone Parents.	<i>Income support</i> regime for lone parents in 2002.	Exits from welfare.	+ 1.66 ppts (9 months after WFI).	14.4 (“gross exit rate”).	1.98 ppts (12 months after WFI).	17.5 (“gross exit rate”).	All lone parents receiving <i>income support</i> , youngest child aged 9-12.	Lone parents with younger children (and DiD).
Cebulla et al., 2008 (Table 1)	Work Focussed Interviews for Lone Parents.	<i>Income support</i> regime for lone parents in 2003.	Exits from welfare.	+ 1.8 ppts (6 months after WFI).	24.0 (“gross exit rate”).			All new claims of <i>income support</i> from lone parents, with child aged 1-2.	
Manning, 2009 (Table 2)	<i>Jobseekers Allowance</i> regime for unemployed people.	<i>Unemployment Benefit</i> and <i>Income support</i> regime for unemployed people.	Exits from welfare.	+ 6 ppts (3 months).	69.0 (“in absence of JSA”).			Claimants of unemployment benefits.	Claimants of unemployment benefits before the JSA reform.
Manning, 2009 (Table 2)	<i>Jobseekers Allowance</i> regime for	<i>Unemployment Benefit</i> and <i>Income support</i>	Entry into work	- 0.4 ppts (3 months)	Does not say.			All claimants of unemployment benefits.	Claimants of unemployment benefits before

Source	Policy or reform	Counterfactual policy or environment	Outcome	Impact – short-run	Baseline: short-run	Impact: long-run	Baseline: long-run	Population	Comparison group
	unemployed people.	regime for unemployed people.							the JSA reform.
Petrolongo, 2009 (Table 2)	<i>Jobseekers Allowance</i> regime for unemployed people.	<i>Unemployment Benefit</i> and <i>Income support</i> regime for unemployed people.	Whether receiving unemployment benefits X months later.	+15.1 ppts (age 18-24); +9.5 ppts (age 25-64). X=3.	Does not say.	+4.1 ppts (age 18-24); +7.4 ppts (age 25-64). X=6.	Does not say.	New claimants of unemployment benefits.	New claimants of unemployment benefits before the JSA reform.
Petrolongo, 2009 (Table 3)	<i>Jobseekers Allowance</i> regime for unemployed people.	<i>Unemployment Benefit</i> and <i>Income support</i> regime for unemployed people.	whether new spell on unemployment benefits within X months.	+2.4 ppts (age 18-24); +3.1 ppts (age 25-64); X=3.	Does not say.	+3.5 ppts (age 18-24); +2.8 ppts (age 25-64). X=6.	Does not say.	New claimants of unemployment benefits.	New claimants of unemployment benefits before the JSA reform.
Petrolongo, 2009 (Table 3)	<i>Jobseekers Allowance</i> regime for unemployed people.	<i>Unemployment Benefit</i> and <i>Income support</i> regime for unemployed people.	whether new spell of disability benefits within X months.	+2.0 ppts (age 18-24); +2.2 ppts (age 25-64). X=3.	Does not say.	+2.4 ppts (age 18-24); +2.9 ppts (age 25-64). X=6.	Does not say.	New claimants of unemployment benefits.	New claimants of unemployment benefits before the JSA reform.
Petrolongo, 2009 (Table A1)	<i>Jobseekers Allowance</i> regime for unemployed people.	<i>Unemployment Benefit</i> and <i>Income support</i> regime for unemployed people.	Probability positive earnings in year X after claiming unempl. Benefit.	-5.4 ppts. X=1.	Does not say.	-2.3 ppts; X=3.	Does not say.	New claimants of unemployment benefits aged 16-24.	New claimants of unemployment benefits before the JSA reform.

Notes: Reference 5 summarised and synthesised results on impact of WFIs in References 1-4.

Early Retirement (Italy, The Netherlands)

Italy

Source	Type	Target group	Data	Size	Time	Method	Success criteria	Results	Internal validity	External validity	ATET	Subst Effect	Total effect	Cost-benefit
Boeri Brugiavini 2008	Amato-Dini Reform.	Italian non-retired workers.	Bank of Italy SHIW data.	2,750 men 1,498 women.	1995-2002.	OLS.	Changes in retirement response versus a cost-reducing reform.	See text.	+	+	No	No	No	No
Angelini Brugiavini Weber 2009	Early retirement.	Persons aged 50+	SHARE data 2006-07 for 10 countries.	11,496 persons.	2006-2007.	Seemingly Unrelated Probit.	Degree of financial distress.	See text.	+	+	No	No	Yes	No
Brugiavini Peracchi 2010	Incentives to retirement.		Italian LFS+ Bank of Italy SHIW data.	...	1977-2002.	OLS accounting for endogeneity.	Higher youth employment rate.	See text.	0	0	No	Yes	Yes	No

Netherlands

Source	Program	Target group	Data	N	Method	Criteria	Results	Internal validity	Extern validity	Subst effects	Cost-Benefit
Berkhout et al. 1994	Early retirement (VUT).	Persons aged 45-64	Survey stats; 1979, 1981 (before VUT); and 1991-92.	150000	Transition rates by gender and year of age before/after; VUT are applied for forecasts with/without VUT.	Employment rate 1994-2005	The 50% of persons aged 60-64 years in the VUT scheme would be disabled (+9%pt), unemployed (+3%pt), employed (+37%pt, increase from 13% to 50%) or retire with private savings (+1%).	+	+	Yes	No
Nelissen 2001	Early retirement (VUT); pre-pension and flex	Persons aged 40-64	Survey on desired retirement age under different	600	Respondents choose between various 2 early retirement ages; mixed logit model with dummies for earliest	Differences of the average retirement age	For every €1,000 per year higher early retirement benefit (1.7% of gross wage) workers retire a few days later; People retire 7, 12 or 8 month later after 35-40 contribution years if a reform of the VUT, pre-	++	+	Yes	No

Source	Program	Target group	Data	N	Method	Criteria	Results	Internal validity	Extern validity	Subst effects	Cost-Benefit
	pension.		conditions, 2000.		possible retirement age, income / pension wealth and person stats.		pension or flex pension would reduce pension after age 65 by 1 contribution year (reduction 2.5-2.9%); Results are 10, 11 and 8 month after 27-35 contribution years (reduction 2.9-3.7%); The reform would increase employment rate at age 55-64 by 33, 36 or 38% for VUT, pre-pension or flex pension; Actuarial neutral reforms of early retirement pensions only would increase the employment rate by 1%pt.				
Euwals et al. 2005	Transition early retirement (VUT) to pre-pension schemes, 1992-99 with phased reduction of benefits.	Persons aged 55-64	Pension fund data of persons, 1989-2000.	2,937.	Mixed proportional hazard, dummy earliest possible retirement age, pension wealth, peak value and person stats Impact on pension after age 65 not taken into account.	Differences of the average retirement age.	Early retirement replacement rates were reduced in phases; a reduction from 80% to 75% increases retirement date by 4 months and from 80% to 70% by 9 months.	-	+	No	No
Euwals et al. 2006	As above.	As above.	As above.	As above.	As above but pension values take into account that pre-pension retirees don't build up old-age pension rights.	As above.	An increase of the 'peak value' by € 100,000 increases the early retirement date by 9 months and a decrease of the 'pension wealth' by € 100,000 increases the early retirement date by 5 months.	+	++	No	No
De Hek, Van Erp 2009	Various hypothetical pension reforms.	Persons aged 15-75	None.	-	Calibration of a lifetime savings and consumption model.	Exit age, consumption, employment rate, govt	Workers retire 28 months later if the VUT scheme were reintroduced. Costs €23bln = 4% of GDP due to transfers and less income taxes; Workers save more at a younger age if social	+	+	Yes	Yes

Source	Program	Target group	Data	N	Method	Criteria	Results	Internal validity	Extern validity	Subst effects	Cost-Benefit
						budget, cash flow pension funds.	security contributions would continue beyond age 65 and retire 4 months later. Workers save more at a younger age if retirement age is raised from 65 to 67 years and retire only one month later.				
Bonenkamp et al. 2010	Defined benefit (DB), individual defined capital (DC) pensions.	Whole labour force.	None.	-	Calibration of a lifetime savings and consumption model.	Consumption before/ after retirement, labour supply, lifetime utility.	With DB workers consume expectationally 45% of lifetime wage income before plus 45% after retirement, versus twice 40% in a DC scheme.	0	+	Yes	Yes lifetime utility gain 6-9%.

Labour Market Services (Austria, The Netherlands, UK)

Austria

	Program	Targeted group(s)	Data	N	Method	Criteria	Results	Internal validity	External validity	Substitution effects	Cost-Benefit
Lutz, Mahringer and Pöschl (2005).	Assisted job search.	Recent unemployed, entrants.	Inflow, 2000-2002.	191,000	Propensity score matching.	Net employment.	Slightly positive.	0	0	No	Yes
Lutz, Mahringer and Pöschl (2005).	Job orientation.	Unemployed.	Inflow, 2000-2002.	191,000	Propensity score matching.	Net employment.	Slightly positive.	0	0	No	Yes
Weber (2008).	Participation in training.	Unemployed.	INflow sample, March-August 2001.	226,000	Decomposition of participation probability.	Program participation.	Participation process is not transparent.	0	0	No	No
Weber and Hofer (2003).	Job-search assistance.	Unemployed.	Inflow sample, March-August 1999.	13,000	Timing-of-events.	Exits to employment.	Positive.	+	0	No	No
Weber and Hofer (2004).	Job-coaching.	New unemployed, entrants.	20% unemployed inflow-sample.	32,000	Timing-of-events.	Unemployment durations.	Positive.	+	0	No	No

All studies use data from the Austrian Social Security Database, described in Zweimüller et al. (2009).

Netherlands

Source	Program	Targeted group(s)	Data	N	Method	Criteria	Results	Intern validity	Extern validity	Subst effects	Cost-Benefit
Blank et al. 2006	Administration of ALMPs from PES to social security funds (SUWI 2001-2004 reforms).	All social security beneficiaries (unemployed, disabled).	Data from regional offices on costs, staffing, placements, characteristics of beneficiaries, 1991-2004.	14x24 panel data, 14 yr, 24 regions.	Regression of unemployment on costs, labour market stats and year dummies; Estimate of internal cost efficiency takes number of benefits as given.	Positive values of post-reform year dummies, corrected for the number of unemployed on the cost-efficiency.	10% more benefits increase cost-efficiency by 20%; a 19%pt higher cost-efficiency in 2002-2004 compared to 1991-2001 is for 14% due to the higher number of unemployed and for 5% due to the reform.	+	+	No	No
Graaf-Zijl et al. 2006	As above.	All welfare beneficiaries aged 15-64 (unemployed, disabled, social assistance).	Complete administrative data, 1999-2004.	5 x >1mln.	Duration and logit models of outflow no correction for the business cycle.	A positive value of the 2004 dummy.	23%pt/ 15%pt less outflow of unemployed in 2004 with/ without trajectory compared to 2000 and 15%pt /4%pt less outflow of social assistance beneficiaries in 2004 compared to 2000, but authors note they did not correct for the business cycle.	-	+	No	No
Kok et al., 2007	Budget incentive: A higher % of budgeted compared to declarable expenditures in the new Act work and	All social assistance beneficiaries.	Microdata on social assistance histories 2000-2006.	688,098 for inflow 83,879 for outflow.	Logit for inflow of an a-select 1% of total population and for outflow of an a-select 20% of all SA beneficiaries.	A more negative coefficient of "degree of budgeting" variable on inflow a more positive	The business cycle had a 8%pt negative impact on the number of social assistance beneficiaries; The degree of budgeting changed gradually from 2001. The effect of budgeting in 2004-2006 was 8%pt (4%pt less inflow + 4%pt more outflow) of which 4%pt was due to the new 2004 Act;	+	+	No	Yes (900 mln euro savings per year)

Source	Program	Targeted group(s)	Data	N	Method	Criteria	Results	Intern validity	Extern validity	Subst effects	Cost-Benefit
	social assistance (WWB 2004).						coefficient on outflow. Extrapolating to 2010 the cumulative effect of new budgeting rules is 16%.				
Stegeman and Vuren, 2006	As above.	As above.	Data from 371 municipalities, 2001-2004 on numbers of beneficiaries, budgets, expenditures.	371 x 4 = 1484	Inflow and outflow are estimated cross-section as a function of budgets, job growth (business cycle), historical expenditure/ budget share (municipal efficiency).	As above	A regression of the number of beneficiaries with the degree of budgeting yields a net effect of 1.5%pt of the new 2004 Act which they conclude in the end; A decomposition of effects gives that the business cycle only affects the inflow from 10 to 12%pt in 2001-2003 to 16%pt in 2004; a -0.8 % pt effect of the budget on inflow in 2001-2003 and -3.2 %pt in 2004; a +1.3%pt effect on the outflow in 2001-2003 and a +4.5 %pt in 2004; total effect is $(3.2-0.8) + (4.5-1.3) = 5.6$ %pt.	-	+	No	No
CPB 2008	As above.	As above.	Review of previous two studies.	None.	Review.	As above.	CPB argue that Stegeman estimated an initial effect of 3%pt and that Kok's 16 %pt overestimates the total effect since Kok did not correct for municipal efficiency and extrapolated a year with the highest effect.	0	+	No	No
Koning 2009	Outsourcing requirements for ALMPs.	Social assistance beneficiaries 15-64 years.	Data from 300 municipalities, 2007 and 2008.	300.	Fixed effects estimation on (a) the number of SA beneficiaries as	Different coefficients for expenditures on in-house	No significant differences.	+	Only study	No	No

Source	Program	Targeted group(s)	Data	N	Method	Criteria	Results	Intern validity	Extern validity	Subst effects	Cost-Benefit
					% of population (b) inflow rate and (c) outflow rate.	and outsourced trajectories.					
Koning and Heinrich 2009	Contracting modes: no cure less pay (NCLP) and no cure no pay (NCNP).	Unemployment and disability beneficiaries; NCNP was only applied for "light" disabled persons (8% of all "cohorts").	Administrative data 2002-2005 per group of beneficiaries for which ALMPs are contracted ("cohort").	7,441 NCLP 1,069 NCNP.	(a) Fixed effects estimation on % of beneficiaries not participating in ALMP after assignment. (b) on program length conditional on job placement or not. (c) job placement conditional on contract form.	Value of the NCNP dummy.	(a) insignificant for unemployment beneficiaries (no selection); 7%pt for the "light" disabled; (b) insignificant for unemployed (no parking) and 2 months lower job search duration for "light" disabled; (c) 3.2%pt more placements for unemployed and insignificant for the "light" disabled.	+	Only study	Yes	No
Van der Heul 2006	Counselling.	Unemployment beneficiaries.	Social security fund admin data, 2002-2003.	21,777	Matching, duration model, selection probabilities (nomination, start ALMP).	Value of treatment dummy.	5%pt more placements 2 years after start unemployment, 6% in a year with low unemployment (2.3%) and -1% in year with higher unemployment (3.4%). Higher impact for ethnic minorities and women (+9%pt).	++	++	No	No

Source	Program	Targeted group(s)	Data	N	Method	Criteria	Results	Intern validity	Extern validity	Subst effects	Cost-Benefit
De Graaf-Zijl et al. 2006	Counselling.	Unemployment (UI) and social assistance (SA) beneficiaries.	Social security fund and municipality admin data 1999-2004.	15,000 UI 16,000 SA.	Probit, without correction for selection effects.	Value of treatment dummy.	+15%pt more placements 2 years after start unemployment for SA; counselling not differentiated for UI beneficiaries.	+	-	No	No
Van den Berg and Van der Klaauw 2006	Low-intensity counselling.	Unemployment beneficiaries with excellent job prospects.	PES data of beneficiaries in 2 large cities, 1999.	394.	Controlled experiment, duration model (parametric and nonparametric), robustness against selection effects is verified.	Value of treatment dummy.	Insignificant 6%pt more placements in the first six months after start unemployment.	++	+	No	Yes (€ 56 per person first 6 months)

UK

Source	Policy or reform	Counterfactual policy or environment	Outcome	Impact – short-run	Baseline: short-run	Impact: long-run	Baseline: long-run	Population	Comparison group
3.Blundell et al. 2004 (table 1)	New Deal for Young People (intensive work focused assistance).	Unemployment insurance (JSA).	Employment.	+5ppts (4 months after start of programme).	26%			19-24 years old, unemployed for 6 months.	19-24 years unemployed in non pilot areas + 25-29 years old in pilot areas.
4.Di Giorgi 2005 (table 1)	As above.	As above.	Employment.			+4.6 ppts (18 months after start of programme).		24 year old, unemployed for 6 months.	25 year old, unemployed for 6 months (RD design along the age threshold).

Source	Policy or reform	Counterfactual policy or environment	Outcome	Impact – short-run	Baseline: short-run	Impact: long-run	Baseline: long-run	Population	Comparison group
9.Dorsett et al. 2008 (table 4.2)	New Deal 25+ (intensive work focused assistance).	Unemployment insurance (JSA)	Exit from JSA.	+10.3 ppts (1 year after start of programme).	29%	+4.4 ppts (2 years after start of programme).	66%		
9.Dorsett et al. 2008 (table 4.1)			Employment.			+5.1 ppts (2 years after start of programme).	22.3% (control group).		
10.Dorsett et al. 2006 (Figure 5.1 and text attached)	Work Focused Interviews for Partners (partners of individuals claiming JSA).	Unemployment insurance (JSA).	Exit out of benefit.	+4.6 ppts (8 months after start of claim) – considered upper bound by the authors.				Stock couples not in work with at least one member on JSA.	Stock couples not in work with at least one member on JSA not eligible to WFIP.
14.Adam et al. 2006 (table 4.10)	Pathways to Work (mandatory worked focused interviews, financial incentives to return to work, support for disabled individuals).	Incapacity Benefit; Benefit for those assessed as unable to work.	Exit from welfare.	+8.2 ppts (10.5 months after joining the programme).	42%			New IB claimant aged 18-59 who made an inquiry about claiming IB.	New IB claimant aged 18-59 who made an inquiry about claiming IB in the control areas.
14.Adam et al. 2006 (table 4.1)	As above.	As above.	Employment.	+9.4 ppts (10.5 months after joining the programme).	22.5%			Idem.	Idem.

Source	Policy or reform	Counterfactual policy or environment	Outcome	Impact – short-run	Baseline: short-run	Impact: long-run	Baseline: long-run	Population	Comparison group
15.Bewley et al. 2007 (Table 5.3)	As above.	As above.	Exit from welfare.			No statistical effect detected 18-20 months after joining the programme.	48%	Idem.	Idem.
15.Bewley et al. 2007 (Table 5.1)	As above.	As above.	Employment.			+7.8ppts (18-20 months after joining the programme).	29.7%	Idem.	Idem.
17.Bewley et al.2008a (Figure 5.1)	As above.	As above.	Employment.			+1.6 ppts (18 months after joining the programme).	2.8%	Existing IB claimant (1 to 2 years on IB) aged 18-59 who made an inquiry about claiming IB.	Existing IB claimant (1 to 2 years on IB) aged 18-59 who made an inquiry about claiming IB in the control areas.
19.Bewley et al. 2008b (Table 1)	As above.	As above.	Exit from welfare.	+ 6ppts (5 months after joining the programme).	39.5%	No significant effect 18 months after joining the programme.		New IB claimant aged 18-59 who made an inquiry about claiming IB in expansion areas.	New IB claimant aged 18-59 who made an inquiry about claiming IB in a set of control areas.
20.Bewley et al. 2009 (Table 5.1)	As above.	As above.	Employment.	No significant effect 18 months after joining the programme.	25.8%			New IB claimant aged 18-59 who made an inquiry about claiming IB in April 2006 expansion areas.	New IB claimant aged 18-59 who made an inquiry about claiming IB in a set of control areas.

Source	Policy or reform	Counterfactual policy or environment	Outcome	Impact – short-run	Baseline: short-run	Impact: long-run	Baseline: long-run	Population	Comparison group
27.Bewley et al. 2008c (Table 1)	Employment, Retention and Advancement (enhanced personal adviser services, financial incentives, training subsidies).	New Deal for those aged 25+	Ever employed.	+ 0.7 ppts (year 1) (NS)	35.0% (control group).	+ 2.0 ppts (year 1 & 2).	42.2% (control group).	Adults aged 25+ who were long-term unemployed.	Adults aged 25+ who were long-term unemployed who were randomised into control group.
As above	As above.	As above.	Average earnings.	+ £169 (2005/6) (NS)	£2,679 (control group)			As above.	As above.
As above	As above.	As above.	Total payments of JSA.	- £7 (year 1) (NS)	£2,274 (control group).	- £72 (year 1 & 2) (NS)	£3,779 (control group).	As above.	As above.
26.Bewley et al. 2008d (Table 1)	Employment, Retention and Advancement (enhanced personal adviser services, financial incentives, training subsidies).	New Deal for Lone Parents.	Ever employed.			+ 5.6 ppts (year 1 & 2)	70.1% (control group).	Out-of-work lone parents who opted to participate in NDLP.	Out-of-work lone parents who opted to participate in NDLP who were randomised into the control group.
As above	As above.	As above.	Earnings.			+ £1,550 (year 1 & 2)	£6,498 (control group).	As above.	As above.
As above	As above.	As above.	Total payments of income support.			- £282 (year 1 & 2)	£5,192 (control group).	As above.	As above.

Source	Policy or reform	Counterfactual policy or environment	Outcome	Impact – short-run	Baseline: short-run	Impact: long-run	Baseline: long-run	Population	Comparison group
28.Sianesi 2010 (Table 1)	As above.	No specific services for working lone parents. No other incentives to work than work tax credit.	Earnings.			+ £874 (year 1 & 2)	£16,392 (control group)	Lone parents working part-time.	Lone parents working part-time who were randomised into the control group.
As above	As above.	As above.	Total payment of income support.			- £16 (year 1 & 2)	£383 (control group)	As above.	As above.
30a.Hales et al. 2003 (Table 5.11.5b-6b)	Employment Zones (contracted-out delivery of W2W services with outcome-based funding).	New Deal for those aged 25+	Entry into work.	+12 pts (c11 months)	22% (control group)	+5 pts (c22 months)	49.6% (control group)	Adults aged 25+ who were long-term unemployed.	Adults aged 25+ who were long-term unemployed in non-pilot areas.
32.Green et al. 2003 and 33.Kirby et al. 2004	ONE (integrated benefit and employment offices with compulsory Work Focused Interviews).	Depends on claimant.	Exits from welfare, entry into job.	None		None		Sick and disabled and lone parents receiving out-of-work benefits.	Same in selected non-pilot areas.
34.Boutall 1998 (Table 2)	Jobfinder (caseworker support for long-term unemployed).	Unemployment benefits regime in 1997/8 for long-term young unemployed.	Exits from welfare.	+ 7 pts	37% (control group)			Adults aged 16-65 who had been unemployed for 2+ years.	Long-term unemployed without Jobfinder intervention (linked to anniversary of claim).

Source	Policy or reform	Counterfactual policy or environment	Outcome	Impact – short-run	Baseline: short-run	Impact: long-run	Baseline: long-run	Population	Comparison group
36.Kay et al. 1996 (Table 10)	1-2-1/Workwise (intensive support for 16-24 who are long-term unemployed).	Unemployment benefits regime in 1995/6 for long-term young unemployed.	Exits from welfare.	+ 13 pts (6 months after joining programme).	22% (control group).			Unemployed aged 16-24 for 12 months who refuse all offers of help at 12 month Restart interview.	

Notes:

References 1, 2 and 7 present macro estimates of the impact of NDYP but are not based on micro-based causal impacts;

Reference 5 has been published in reference 4;

Reference 7 is not included as it lacks quantitative estimates of impact;

References 12 and 13 not included as the impact estimates were not considered robust by the authors;

Reference 22 is not included as the quality of the evidence was not deemed sufficient to be included;

References 23, 24 and 25 are not included as subsequent reports provided better estimates of the programme's impact;

References 28 and 29 as they explore the validity of estimates published in other reports;

Reference 30b is not included as not enough information given in the report to turn estimated coefficients into meaningful quantities.

Training (Germany)

Source	Type	Target group	Data	Size	Time	Method	Success criteria	Results	Intern validity	Externvalidity	ATET	Subst Effect	Cost-benefit
1 Lechner, Wunsch 2006	Retraining (US); General Training (GT); Job related Training; (JRT); Work-related cross-over training (FbW).	Unemployed in East Germany, who receive unemployment insurance or assistance and are capable for promotion through FbW.	Integrated histories of employees aged 25-49 and previously working at least half days.	US 176; GT<9 month 605; GT 9+ month 533; JRT 313.	2000-2002 for 2.5 years since start.	Multivariate mixed proportional hazard model; Propensity Score Matching; Probit for employment of non-participant.	Regular employment; unemployment duration; Total income.	(-) significant for East Germany and (0) General Training; High costs of unemployment income support and wage cost subsidy.	(-)				
2 Biewen et al. 2007	Short-term training (KT); Theoretical further education (TWB); practical further education (PWB); Retraining (US).	Unemployed who previously worked at least 3 months consecutively and in regular employment and became unemployed in 02.2000 – 01.2002, 25-53 years old and had contact with the PES.	IEBS completed with further non-public data.	See tables.	30 months after end of program.	Stratified propensity score matching; separate analysis for males (M) and females (F) in East (E) and West (W) Germany, resp.	Employment	TWB: (+) for F+M, alo > 6; FD+ alo > 3 (0) F+M (+) alo < 6; FE, FW, alo < 3 for FE, ME; PWB: (+) FW (0) MW, FE, ME TWB v. KTM: (0) PWB v. KTM: (+) FW, MW (0) FE, ME PWB v. TWB: (+) F (0) E	(-)				

Source	Type	Target group	Data	Size	Time	Method	Success criteria	Results	Intern validity	Externvalidity	ATET	Subst Effect	Cost-benefit
3 Osiko-minu 2009	Short term training (KT); Long term training (LT).	West-German aged 25 – 53 who previously where at least 3 months regular employed.	IEBS	KT: (8,485); LT: (5,388).	07.1999-12.2001.	Dynamic Hazard Rates Modell.	Unemployment duration; Cost effectiveness; Employment duration.	Unemployment duration: (+) KT (-) LT; Employment duration; (+) for LT compared to KT; KT cost effective for most participants; LT not cost effective for most (56%); Effects more positive for LT if entry is later; KT more effective if entry is earlier.	(+)				
4 Fitzenberger et al. 2010	Promotion of vocational training.	Unemployed who previously worked 125 days consecutively.	Process data of IAB; IEBS; Histories of employment and benefits; Job applications; Participant	West: 1740 M; 1431 F; East: 1300 M; 848 F.	07.99-12.00 observe 10 quarters (2,5 year).	Bayesian Markov; dynamic random; effects probit model. Chain Monte Carlo	Effect number and duration of training measures on transition rates between employment and un-employment	(+) for West- and East Germany, men and women; Effects are stronger for women; Participants in longer training measures have	(0)				

Source	Type	Target group	Data	Size	Time	Method	Success criteria	Results	Intern validity	Externvalidity	ATET	Subst Effect	Cost-benefit
			database.			(MCMC).		higher transition rates into employment.					
5 Fitzenberger Völter	Practice firms (ÜF); Specific Professional Skills and Techniques (SPST); Retraining (US).	Unemployed aged 25-55; For retraining aged 25-50, receiving UI or UA support or have worked at least 1 year.	IABS empl; LED benefit payment data; FuU training data.	Women: ÜF 145 SPST 1,210 US 195 Other training 4,585; Men: ÜF 73 SPST 528; US 234 Other training 5,076.	For 7 years since entry unemployt in 1993-1994.	Dynamic multiple treatment framework.	1. Employment; 2. Benefit dependency.	For East Germany: 1. (+) for SPST; (0) for US and ÜF; 2. (0) for all groups.	(0)				
6 Stephan Pahnke 2008	Vocational training (VT); Work-related cross-over training, Practical vocational training; Professional training; Practice firms (ÜF); Groups of	Unemployed aged 25-29 who in March 2003 were unemployed for less than one year.	Results database of the PES.	Eligible 192,460; 2,890 training <6 months 2,332 training 6-12 months; ÜF 532 GM 1,121.	Entry in March 2003. 3,5 years observe after start of program.	propensity score matching; nearest neighbour matching; radius matching.	Cumulative number of days that a person had regular employment. % in regular employment at end of observation period.	(++) for VT < 6 months; (+) for VT 6-12 months, and ÜF; (-) for GM with a degree in a recognized occupation; (+) for all measures as regards the share of	(+)				

Source	Type	Target group	Data	Size	Time	Method	Success criteria	Results	Intern validity	Externvalidity	ATET	Subst Effect	Cost-benefit
	measures (GM).							regular employed.					
7 Rinne et al	General Training (GT); Training in key qualifications (KQ); Practice firms (ÜF).	Unemployed 17-65.	IEBS.	GT: 25,959; KQ: 15,902; ÜF: 22,081; Non-participant 247,796.	Inflow sample of 2002.	Propensity score matching.	Employment probability; Wage pay in new job.	(+) for employment probability for all types of training; (+) for wage pay.	(+)				
8 Lechner Wunsch 2007	Practice firms = ÜF; Retraining = US; Short term training = KT; Long term training = LT.	Unemployed UI beneficiaries aged 20-55, at least 1x fulltime regular employed, did not participate in training the 4 preceding years; No ALMP for 11 months for non-participant.	IAB Employment subsample. Benefit payment register. Training participant data.	Average ca. 400 persons.	1986-1995	Propensity score matching.	Regular employed compared to receipt of unemployment benefit; Gross income; Lock-in-effects.	Negative Lock-in effects; (+)employment effects and income effects in mid-to long term for all programs; Lock-in effects are higher in times of low unemployment; The positive long term effects are higher, if training starts in times of high unemployment.	(+)				

Source	Type	Target group	Data	Size	Time	Method	Success criteria	Results	Intern validity	Externvalidity	ATET	Subst Effect	Cost-benefit
9 Bernhard Kruppe 2010a	Vocational training - 1 year >1 year (Retraining, US)	Recipient of Arbeitslosengeld II on 31.01.2005. Programme entry between February 2005 – April 2005.	IEB LHG	Training -1 Year 3,376 treated 67,753 control US 362 treated 67,740 control.	Observe 2.5 years.	Probit Models; Matching Algorithms.	Regular employment; No receipt of Arbeitslosengeld II.	(+) for all analysed groups (Women, Men, East und West Germany).	(+)				
10 Fitzenberger et al. 2007	Provision of Specific Professional Skills and Techniques.	Unemployed and workers threatened with unempl. aged 25-55. Control group includes participants of other training.	IABS FuU- Data	Entries: 12,320 West; 7,297 East; Training Spells: 751 West; 971 East.	Entry 1993-1994; for 36 Month since start of program.	Propensity score matching.	Employment probability.	(+) for West Germany; (0) in East Germany; Lock-in-Effect is stronger in East Germany.	(-)				
11 Fitzenberger et al. 2008	Practice firms (ÜF). Provision of Specific Professional Skills and Techniques (SPST).	Unemployed aged 25-55.	IABS LED FuU - Data	Months after start unempl. Stratum 1: 0-6 2: 6-12 3: 12-24 1986 ÜF: 246 SPST:	1986/87 1993/94 Observe till 6 years after start of program	Propensity score matching	Probability of employment	For West Germany: (+) for 1986 all programs together in mid and long term; (0) for ÜF in 2. and 3. Stratum; For 1993 mid and long term:	(-)				

Source	Type	Target group	Data	Size	Time	Method	Success criteria	Results	Intern validity	Externvalidity	ATET	Subst Effect	Cost-benefit
	Retraining (US)			1,093 US: 375 1993 ÜF: 325 SPST: 1,944 US: 458				(0) for ÜF in 1.Stratum; (+) for ÜF in 2. and 3. Stratum; (+) SPST and US; (0) for 1993 compared between programs; For 1987 weak evidence that ÜF and SPST outperform US.					
12 Hujer et al. 2006a	Vocational Training-programmes.	Unemployed residents aged 20-50, who did not previously participate in an ALMP-measures.	Job Seeker Database; MTG; Employee-statistic (BSt).	13,644; Of which 1,506 participate; 12,138 did not participate.	1999Q4; Observe till Dec. 2002.	Bivariate Mixed proportional hazard Model.	Exit to regular employment lasting at least 6 months; Exit rates into employment.	(-) for East Germany.	(+)				
13 Lechner et al. 2007	General vocation training (GBWb); Retraining (US).	Unemployed residents aged 20-53 who previously worked at least half days.	IABS LED FuU	Non-participant; 4604 GBWb 1,021 US 445.	1993-1994 observe till 2002.	Matching.	1. Exit to employment; 2. Wage rate; 3. Unempl. Probability.	1. & 2. in East Germany; (+) average in long run negative lock-in-effect in short run; (0) for men in long-lasting training	(+)				

Source	Type	Target group	Data	Size	Time	Method	Success criteria	Results	Intern validity	Externvalidity	ATET	Subst Effect	Cost-benefit
								measures but (+) for women; 3. No effect.					
14 Lechner et al. 2010	Practice firms (ÜF) Retraining (US) Short term training (KT) Long term Training (LT) Career Improvement (CI)	Previously min. 1x employed, capable for training, not from Berlin, receiving UI/UA benefit, aged 20-55.	IABS LED FuU	Non-participant 9197 ÜF = 273 US = 413 KT = 572 LT = 329 CI = 110	1993-1994 Observe till 2002	Matching	Probability of employment	Negative lock in effects in the short run for all measures; Positive effects in the long run for all measures except ÜF; (0) For ÜF.	(+)				
15 Wunsch Lechner 2008	General training < 6 month and > 6 months (GT); Short Training (ST); Degree Course (DC); Job Related Training (JRT); Short combined measures (SCM);	Aged 25-49 receiving UI/UA, was at least half days employed. Control: Receiving UI/UA, does not participate in training measures during observation period.	IABS	Non-participant = 15,013; GT 6-: 551; GT 6+: 772; ST: 657; DC: 415; JRT: 558; SCM: 846; JSA: 960; EP: 211.	2000-2002; Observe 2.5 years.	Propensity score matching.	(1) Probability of non-subsidized employment; (2) Cost-effectiveness.	(1) (0) for short and mid-term programmes; (-) for longer programmes; (2) (-) for all in a period of 2.5 years.	(+)				

Source	Type	Target group	Data	Size	Time	Method	Success criteria	Results	Intern validity	Externvalidity	ATET	Subst Effect	Cost-benefit
	Jobseeker Assessment (JSA); Employment Programs (EP).												
16 Schneid-er et al. 2006	Work-related cross-over training.	Unemployed aged 17-65.	IEB	5,600 participant; 2.1 million Non-part.	2000Q1- 2004Q2	Conditional Propensity score matching. Proportional Hazard-Model	1.Probability employment; 2.Probability unemployment; 3.Probability income support; 4.Duration model.	1.Before reform: for men (+) after 22 months, for women (0/+) After reform: briefer lock-in effect 2.Before reform: (0) for men and women After reform: (+) for men (0/+) for women; 3.Before reform: (0) for men and women After reform: (+) for men (0) for women; 4. Before and after reform (+) for men and women.	(+)				

Source	Type	Target group	Data	Size	Time	Method	Success criteria	Results	Intern validity	Externvalidity	ATET	Subst Effect	Cost-benefit
17 Kluve et al.	Work-related cross-over training (BW).	Unemployed men.	IEB.	3,180 Participant compared only with respect to course durations, not with non-participant.	2000Q1-2002Q4 till 2 years after program entry.	Generalized Propensity Score.	Employment probability (EP) 1 year after end of program. EP 2 years after start of program. Dose-Response-Function (DRF).	Realized training time: flat profile of DRF; Planned training time: for training <100 days EP increases; For training 200-250 days EP has a minor effect; EP decreases for a duration >330 days, with large confidence intervals; Realized = planned training time: increase of treatment effect in the first 100 days then flatter slope; Conclusion: positive effect takes place in	(+)				

Source	Type	Target group	Data	Size	Time	Method	Success criteria	Results	Intern validity	Externvalidity	ATET	Subst Effect	Cost-benefit
								first 3 months.					
18 Bonin et al. 2005	Single-measure vocational training. Work-related cross-over training (Fbw).	Unemployed aged 17-65.	IEB	5,600 Participant; 2,1 million Non-participant.	2000Q1 – 2. 2004Q2	Conditional Propensity score matching. Proportional Hazard Model.	1.Probability Employment; 2.ProbabilityUnemploymt; 3.Duration likelihood in FbW measure.	1. (0) before (+) after reform; 2. (0) before (-) after reform but observation period is too short; (+) for exit rates out of unemployment but first job does no appear to be stable; 3. (+) compared to before reform.	(+)				

Employment Incentives (Hungary, Italy, Spain)

Hungary

Source	Type of program	Target group	Database	Size	Time	Identification method	Success criteria	Results	Internal validity	Externality	AT ET	Subst. effects	Cost-benefit
O'Leary 1998	Wage subsidy up to 50% of the wage bill up to one year. Employment must be sustained for an identical period after exit from program.	Longer term registered unempl. (6 month, 3 month labour market entrants).	Survey data following up supported individual s + a random control group.	Treated 1,131, control 3,338	96-II to 97-II, control 95-II to 96-II	OLS on exit with control group. Matched pairs, incl personal and regional char.	Exit to employment, wage if employed, use of UI.	Effect on employment prob.: 17-24%pt if unadjusted/unmatched; 0 to -6%pt with controls. No effect on earnings.	+	0	Yes	No	Some (wage gains)
Csoba Nagy Szabó 2010	As in O'Leary (1998), but support payable up to 100% of the wage bill (new regulation).	Longer term registered unempl. (6 mnth, 3 mnth labour market entrants).	Survey data following up supported individual s + a random control group.	Treated 1,041; control 1,068.	Sept 2009-Feb 2010.	Logit on exit with control group, incl personal and regional char.	Exit to employment.	Significant positive effect (odds ratio compared to control group: 24).	-	-	No	Some	Some

Italy

Source	Type	Target group	Database	Size	Time	Method	Success criteria	Results	Intern validity	Extern validity	ATET	Subst. Effects	Total effect	Cost-benefit
Paggiaro et al. 2002	Employment subsidy.	Dismissed workers.	administrative PES data Veneto region.	42,061	1995-1999	Flexible duration models.	Exit to permanent employment.	See text	0	0	No	No	No	No
Rettore et al. 2008	Employment subsidy.	Dismissed workers.	INPS, administrative data Veneto region.	23,644	1995-1998	Regression discontinuity.	Exit to permanent employment.	See text	++	+	Yes	Yes	Yes	Partly
Cipplone et al. 2004	Employment subsidy.	Unempl. for 24+ month, age 24+.	Italian Labour Force Survey.		1995-2002	Difference-in-difference.	Increase in labour force participation.	See text	+	+	Yes	See text	Yes	No

Spain

Source	Type	Target group	Database	Size	Time	Method	Success criteria	Results (*)	Intern validity	Extern validity	ATET	Subst Effect	Cost-benefit
Kugler et al. 2002	Lower dismissal cost for new permanent contract & reduction of payroll to stimulate creation of/ conversion into permanent contracts.	Workers under 30 and over 45 years old.	Spanish Labour Force Survey.	652,612	1987-II to 2000-IV	Diff. in diff. with logit marginal effects	Employment Transition into employment Transition into permanent employment Transition permanent contract into unempl.	Employment +2.2% YM +1.6% YW, none OW; Transitions: +4.5% YM +1.6% YW, none OW; Tr. Into perm +2.4% YM +2.8% YW; No effect on dismissals.	+	++	Yes	No	Through logic
Arellano 2005	See above.	Workers 15-29 and 45-64 excl migrants,	Microdata of INEM for Madrid region.	1,797,555 contracts of 430981 workers.	Jan 2000- Dec 2001	Diff. in diff. with probit estimate.	Transition to permanent contract, Total, From	+1.5% men 40-50 year, -2% workers under 30, rest insignificant.	+	-	Yes	No	No

Source	Type	Target group	Database	Size	Time	Method	Success criteria	Results (*)	Intern validity	Extern validity	ATET	Subst Effect	Cost-benefit
		disabled.					non-empl., From temp. contract.						
Toharia 2008- I	See above, 2006 extension to all workers.	All workers	PES	6,059,614 contracts.	Jun 2005- May 2008	Diff.in diff. with logit marginal effects.	Job Stability of jobs with permanent contract.	2006 reform had no significant effects.	+	+	No	No	No
Toharia 2008-II	See above, 2006 extension to all workers.	All workers.	Muestra Continua de Vidas Laborales.	8,625,725 contracts	2004-2007	Diff. - in diff. with logit.	Job Stability of jobs with permanent contract.	Survival prob with subsidy is higher after 1 st year and lower in 2007.	+	+	No	No	No
Toharia 2008-III	See above, 2006 extension to all workers.	Workers from Andalucía/ Catalunya.	Social security records.	640,628 / 10,287302 contracts.	June and Dec of 2005, 2006, 2007	Diff. in diff. with logit.	Job Stability of jobs with permanent contract.	+36%/ +33% more subsidised new jobs survive than new jobs with ordinary contract.	+	+	No	No	No
Cebrián 2009	See above, 2006 extension to all workers.	All workers.	Muestra Continua de Vidas Laborales + SPEE.	2,180,440 contracts.	Jan 2004- Dec 2007	Diff. in diff. with Cox duration model.	Job Stability of jobs with permanent contract.	-30% fewer dismissals with subsidised jobs than with ordinary contract.	+	+	No	No	No
García-Pérez & Rebollo, 2009	Regional wage subsidies to foster permanent employment.	All workers.	Muestra Continua de Vidas Laborales.	1,058,008 unempl. Spells and 737,103 temporary contracts.	1997-2004	Diff. in diff.	Exit from unempl. Or temp. contract to perm. Contract.	Transitions: +4% YM +10% YW, +67% conversion of temp. contract women 30-45 years old.	+	+	No	No	No

(*) YM = Young Men (under 30 years), YW = Young Women (under 30 years), OW = Older workers (over 45 years).

Supported Employment and Rehabilitation (Sweden, Poland)

Sweden

Source	Type	Target group	Data	Size	Time	Method	Success criteria	Results	Internal validity	External validity	ATET	Subst Effect	Cost-benefit
Skedinger Widerstedt 2007	Recruitment practice by Samhall	Disabled individuals	HÄNDEL, info from Samhall	8,849	1992-1999	Duration models	Absence of cream skimming and duration of unemployment.	See text	IFAU standard	+	...	...	No

Poland

Source	Type	Target group	Data	Size	Time	Method	Success criteria	Results	Internal validity	External validity	ATET	Subst Effect	Cost-benefit
Chłoń-Domińczak and Poznańska (2007)	No specific program	Disabled individuals	Labour Force Survey	123,126 (1997), 101,842 (2002) 98,087 (2005)	1997, 2002, 2005	Difference-in difference of logit marginal effects	Employment probability	Employment probability of disabled was 20-40 %pt lower than of non-disabled workers (sex, age, education, marital status, region controlled for).	+	+	No	No	No

Direct Job Creation (Poland)

Poland

Source	Type	Target group	Data	Size	Time	Method	Success criteria	Results	Internal validity	External validity	ATET	Subst Effect	Cost-benefit
Bukowski et al. (2008)	All direct jobs	All workers registered at labour offices.	PULS – a system covering all workers registered at labour offices.	Random sample of 20,146 persons.	2006-II to 2007-III.	Logit marginal effects, propensity score matching.	Employment in non-subsidised jobs and transition probability.	Ineffectiveness of direct job creation (and high effectiveness of business incentives, training programs, apprenticeship).	+	+	No	Yes	Yes

Start-up incentives (Germany)

Source	Type	Target group	Data	Size (Men/ Women)	Time	Method	Success criteria	Results	Internal validity	External validity	ATET	Subst Effect	Cost- ben.
Baumgartner et al. 2006	Überbrückungsgeld; (Bridge allowance); Existenzgründungszuschuss (top-up to social minimum).	ÜG unemployed beneficiaries, participants in ALMP or restructuring measure. Must pass an ability test of self-support; EZ: Similar but until 2004 without ability test. Income from self-employment <€25,000/year.	Admin data of BAA, survey data, Inflow 2003-III to 2005-I.	ÜG West 1,665 / 520 Ost 621/ 274; EZ West 1,116/ 990; Ost 528/381; Control West 2530/1443; Ost 1077/622.	2003-III to 2005-I.	Matching.	(1) Employment without repeat funding (2) Survival in self-employment.	(+) (1) avg effect for both programs, West and East Germany, men and women (+)(2) for both programs.	+				
Caliendo et al. 2006	As above.	As above.	Admin data of BAA, survey data, inflow 2003-III to 2005-I.	ÜG West 1,820/ 597 Ost 478/203 EZ West 1267/1058 Ost 383/292 Control.	First 16 month since entry.	Propensity Score Matching.	Avoidance of unemployment.	(+) for all inclusive all subgroups.	+				
Baumgartner et al. 2008	As above.	As above.	Integral employment biographies; CATI phone	ÜG 1,207 /378; EZ: 811/ 704;	Inflow 2003-III to 2006-I.	Propensity Score Matching; Diff. in	(1) unemployment risk; (2) lasting	(1) (+) for both programs (2) (+) for	+				

Source	Type	Target group	Data	Size (Men/ Women)	Time	Method	Success criteria	Results	Internal validity	External validity	ATET	Subst Effect	Cost- ben.
			survey.	Control: 1,448/ 848.		diff..	regular employment of self- employment; (3) income effects.	both programs (3)(+) for both programs; effect for ÜG > EZ.					
Calien- do 2009	As above.	As above.	As above only East- German.	ÜG 650, EZ 647 Control 943.	First 28 month since entry.	Propensity Score Matching; Diff. in diff.	(1) unemployment risk; (2) lasting regular employment or self-; (3) income effects subdivided into monthly income and entire personal income.	1) und (2) (+) for both programs in East Germany; (3)(+) but for women no significant difference in entire personal income.	+				
Calien- do Künn 2010	As above.	As above.	As above, only West- German, inflow 2003- III to 2008- II.	ÜG 1780 EZ 486 Control: 929.	First 56 month since entry.	Propensity Score Matching; Kernel Matching; Diff. in diff.	Not unemployed; Unsubsidised employment. Income effects subdivided in income from labour and total income.	(+) for all criteria; Effect on employment is higher for low than for high educated; With EZ income					

Source	Type	Target group	Data	Size (Men/ Women)	Time	Method	Success criteria	Results	Internal validity	External validity	ATET	Subst Effect	Cost- ben.
								effect is higher for low educated than for non-participants.					
Calien- do Künn Wießner 2010	As above.	As above.	As above, Inflow 2003- III to 2008- II.	ÜG 1,466 EZ 1,351 Control 2,214.	2003-III to 2008- II; 3 waves.	Selectivity analysis; Propensity Score Matching; Kernal Matching.	(1) Out of unemployment (2) integration into the labour market; (3) income effect.	(1) (+) for all subgroups (2) (+) for all subgroups (3)(+) for all subgroups; For women in West Germany not always significant	+				
Gross et al. 2006	Business Start-up Aid.	Business start- ups from unemployment.	Database of ESF projects; Chambers of Commerce data, 2002- 30.June 2004.	Treated 170 Control 115.	(1)-(3) 12/24 month since start-up.	Propensity Score Matching.	(1)Survival rate; (2) Number of employees; (3) revenue per employee; (4) employment growth rate.	(-) insignificant for (1)-(3); (-) significant for (4).	-				
IAB 2005	ÜG	See above.	IEB, 1 Jan 2000-31 Dec 2002.	West 2000: 23447/9297 East 2000: 12727/5559	12 month per cohort.	Matching.	(1) Not registered as unemployed; (2) regular	(-) for (1) and (2); (+) for (3) and (4).					

Source	Type	Target group	Data	Size (Men/ Women)	Time	Method	Success criteria	Results	Internal validity	External validity	ATET	Subst Effect	Cost- ben.
				West 2001: 26482/ 10268 East 2001: 14017/6337 West 2002: 35181/ 14015 East 2002: 14550/7001			employment without further support; (3) not registered as job seeker; (4) not registered as job seeker without further support.						
IAB 2006	As above.	As above.	IEB CATI, 2000-2002.	ÜG: close to above; EZ West 1142/1024 East 358/254; Control EZ West 976/1017; EZ East 563/358.	2000- 2002 for 30 month; 2003-III for 28 month; 2004-III for 16 month.	Propensity Score Matching; Kernel Matching; Exit rates.	2000 cohort: (1) no entry as unempl; (2) no entry as unempl. without further subsidy; 2003+2004 cohorts: (1) No entry as unempl; (2) No entry as unempl. without further subsidy; (3) self- employment or regular employment; (4) income	Compared to control: 2000-2002 cohorts only for ÜG (+) for both variables in East Germany the effect is more positive; 2003+2004 cohorts: (4)(+) for ÜG; (-) for EZ for both cohorts; (1)-(3) (+)					

Source	Type	Target group	Data	Size (Men/ Women)	Time	Method	Success criteria	Results	Internal validity	External validity	ATET	Subst Effect	Cost- ben.
							trend; (5) monetary efficiency.	for both cohorts Comparison between programs: (4) no effect after 16 month in East Germany and ÜG>EZ in West Germany 245.					
Wolff et al. 2008	Einstiegs- geld.	Start-ups, age 25-57, registered unemployed and UI recipients.	Integral employment biographies; Job seekers database.	Treated: 1,207; Potential control: 273,232.	Inflow Jan – April 2005; Till 20 month since program start.	Propensity Score Matching.	(1) regular employment without self- employment; (2) no entry as unempl. or job seeker; (3) no entry as unempl; (4) recipient of unemployment benefit II.	1) (-) for all groups; (2)-(4) (+) for all groups.					



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