



UvA-DARE (Digital Academic Repository)

Labour market models in the EU

Koster, F.; McQuinn, J.; Siedschlag, I.; van Vliet, O.

[Link to publication](#)

Citation for published version (APA):

Koster, F., McQuinn, J., Siedschlag, I., & van Vliet, O. (2011). Labour market models in the EU. (NEUJOBS special report; No. 1). [Bruxelles]: Neujobs.

General rights

It is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), other than for strictly personal, individual use, unless the work is under an open content license (like Creative Commons).

Disclaimer/Complaints regulations

If you believe that digital publication of certain material infringes any of your rights or (privacy) interests, please let the Library know, stating your reasons. In case of a legitimate complaint, the Library will make the material inaccessible and/or remove it from the website. Please Ask the Library: <http://uba.uva.nl/en/contact>, or a letter to: Library of the University of Amsterdam, Secretariat, Singel 425, 1012 WP Amsterdam, The Netherlands. You will be contacted as soon as possible.



LABOUR MARKET MODELS IN THE EU

FERRY KOSTER

JOHN MCQUINN

IULIA SIEDSCHLAG

OLAF VAN VLIET

NEUJOBS SPECIAL REPORT NO. 1/SEPTEMBER 2011

Abstract

In the European Union, the most important labour market models that have been proposed for labour market reform are flexicurity and the transitional labour market. In this position paper, we conceptualise the models of flexicurity and the transitional labour market, and we outline potentially relevant research questions. These research questions focus on explaining the variations in labour market policies across EU countries and the impact of labour market institutions on labour market outcomes as well as innovation and the adoption of new technologies.



NEUJOBS Special Reports present work being conducted within the NEUJOBS research project, which analyses likely future developments in European labour markets.

The views expressed in this report are those of the authors and do not necessarily represent any institution with which they are affiliated. See the back page for more information about the NEUJOBS project.



ISBN 978-94-6138-125-5

This paper is available for free downloading from the CEPS website (www.ceps.eu) or the NEUJOBS website (www.neujobs.eu)

© Koster, McQuinn, Siedschlag and Van Vliet/Leiden University, ESRI, 2011

CONTENTS

1. Introduction.....	1
2. Flexicurity policies.....	1
2.1 The concept of flexicurity.....	1
2.2 The political economy of flexicurity policies.....	3
2.3 Interaction between labour market policies	5
2.4 Focus on OECD countries	5
3. The transitional labour market model.....	5
3.1 Distinguishing states.....	7
3.2 Degree of change	7
3.3 Important actors	7
4. Trends and patterns	8
4.1 Trends and regulations related to TLM	8
4.2 Employment protection legislation in the EU: Patterns and trends, 1985–2008.....	13
4.3 The effects of EPL on innovation and the adoption of new technologies, 1985–2008.....	17
5. Research agenda	22
References.....	23

List of Figures

Figure 1. Overall employment protection legislation in EU countries, 1985–2008	14
Figure 2. Employment protection for regular contracts (EPR) in EU countries, 1985–2008	15
Figure 3. Employment protection for temporary contracts (EPT) in EU countries, 1985–2008	16
Figure 4. Employment protection legislation and innovation in EU countries (residents only), 1985–2008.....	18
Figure 5. Employment protection legislation and innovation in EU countries (residents and non-residents), 1985–2008.....	19
Figure 6. Employment protection legislation and the share of the ICT sector in GDP, EU countries, 2008	20
Figure 7. Employment protection legislation and Internet users, EU countries, 1997 and 2008.....	21
Figure 8. Employment protection legislation and broadband penetration, EU countries, 2008	22

List of Tables

Table 1. Unemployment rate (%) per country, 2000–10.....	9
Table 2. Long-term unemployment (%), 2000–10	10
Table 3. Average exit age from the labour force, 2001–09	11
Table 4. ALMP expenditures (%), 1985–2005	12
Table 5. Work centrality per country.....	13

LABOUR MARKET MODELS IN THE EU

FERRY KOSTER, JOHN MCQUINN, IULIA SIEDSCHLAG & OLAF VAN VLIET *

NEUJOBS SPECIAL REPORT NO. 1 / SEPTEMBER 2011

1. Introduction

Economic, demographic and socio-ecological developments have triggered and will continue to lead to labour market reforms in many European countries. Hence, how to organise the labour market is one of the key public policy issues of today. In policy debates, the most important concepts seem to be 'flexicurity' and the 'transitional labour market' (TLM). In this position paper, we conceptualise the models of flexicurity and the transitional labour market, and raise potentially relevant research questions. This provides a basis for the empirical analyses that will be carried out in the research papers to be delivered as part of Work Package 6.

Flexicurity refers to a combination of loose employment protection legislation (EPL), generous unemployment benefits and strong efforts on active labour market policies (ALMPs). The scholarly attention on this labour market model has been mainly theoretical and conceptually oriented. It is less clear to what extent labour market policy reforms along the lines of the flexicurity concept have actually been implemented across European Union countries and which factors can explain the variation in these policy reforms across countries and over time. These issues are addressed in section 2. Subsequently, we discuss the outcomes of these measures in terms of transitions on the labour market in section 3. The TLM model can be used to analyse transitions that individuals make during their life course, such as from unemployment to employment, from employment to employment and from employment to unemployment. We argue that the concept of the TLM model can be developed in more detail when a number of empirical questions are answered. In section 4, we present descriptive statistics for a number of labour market outcomes, such as long-term employment. Furthermore, we discuss other effects that labour market policies – and in particular EPL – are likely to have, namely on innovation and the adoption of new technologies. These points are illustrated with descriptive statistical analyses. Finally, a number of directions for further research are outlined in section 5.

2. Flexicurity policies

2.1 The concept of flexicurity

Since the beginning of the 21st century, flexicurity has been a main concept in European labour market reform. At the EU level, the concept is integrated in the European employment strategy, which is aimed at increasing employment and reducing

* Ferry Koster is at Erasmus University Rotterdam & Leiden University; John McQuinn and Iulia Siedschlag are both at the Economic and Social Research Institute & Trinity College Dublin and Olaf van Vliet is at Leiden University.

unemployment in EU countries. In addition, among policy-makers flexicurity is considered an important way to enhance Europe's economic growth and social cohesion (e.g. European Commission, 2006, 2007a and 2007b; Boeri et al., 2007). More flexible labour markets would improve Europe's competitiveness owing to the lower costs for firms to adjust to the dynamics of the highly integrated international economy. Increased labour participation and higher income security contribute to higher levels of social inclusion. As such, flexicurity is expected to contribute to the achievement of the objectives of the Europe 2020 strategy.

The main characteristic of flexicurity is that it is intended to overcome the tensions between labour market flexibility on the one hand, and the provision of social security for workers on the other hand (Viebrock and Clasen, 2009). Flexible labour markets can be seen as beneficial for job creation, especially during periods of recovery after recessions, but they also involve lower levels of economic security. Welfare state programmes provide economic security, but they generate unintended effects, such as longer unemployment spells and therefore higher public expenditure and less mobility on the labour market. In the flexicurity concept, flexibility and security are viewed as complementary.

In the literature, the term 'flexicurity' has been used to refer to different configurations of labour market policies, in which several types and degrees of flexibility (external and internal numerical, functional and wage) and security (job, employment and income) have been stressed (Wilthagen and Tros, 2004; Madsen, 2007; Viebrock and Clasen, 2009). In the often-mentioned examples of flexicurity policies in reality, namely those in Denmark and the Netherlands, there is variation too. The Danish model of flexicurity builds on the combination of flexible labour markets, generous unemployment benefits and a strong emphasis on activation. This combination is known as the 'golden triangle'. The Dutch flexicurity model is more centred on combining non-standard work, such as temporary agency work and part-time work, with regular social security rights (Viebrock and Clasen, 2009). Because the Danish model is most used to illustrate the concept of flexicurity in the literature and in EU employment guidelines and policy documents, we focus on the labour market policies of the Danish type of flexicurity. This is a combination of three types of labour market policies. First, employment protection legislation that is relatively loose provides flexibility for firms in terms of the hiring and firing of workers. This is compensated by a rather generous social safety net for the unemployed through unemployment benefits, which is the second element, income security. Indeed, the exchange between employment protection legislation and unemployment benefits can be regarded as the main axis of flexicurity. Economists usually concentrate on the trade-off between unemployment benefits and employment protection (see e.g. Boeri et al., 2006). Third, flexicurity involves strong efforts on active labour market policies. When low employment protection leads to more dismissals, the mobility on the labour market will be greater when the skills of the unemployed are improved by training. Thus, transitions from unemployment to employment can be made easier, leading to employment security. As a result, job security is replaced by employment security, which is a central feature of the flexicurity concept.

2.2 The political economy of flexicurity policies

Compared with the amount of conceptual and theoretical work, there is relatively little empirical research on flexicurity. Besides the typical examples of Denmark and the Netherlands, which have been extensively discussed in the literature, there is little insight into the extent to which labour market policies have been reformed along the lines of the flexicurity concept in other European countries. This is quite remarkable because flexicurity has been considered a successful reform strategy. Since a reform proposal consists of a package of policies rather than a single labour market policy, it is expected to overcome opposition from employees in reform processes more easily (Eichhorst and Konle-Seidl, 2005). Lower levels of employment protection may be compensated by more generous unemployment benefits and activation programmes. Hence, social partners are seen as important actors in the policy-making process of flexicurity policies (Viebrock and Clasen, 2009).

With respect to the effect of the degree of corporatism on labour market policies, there are generally two theoretical arguments. The first argument builds on the insider–outsider approach (Lindbeck and Snower, 2001). In this view, insiders can be defined as incumbent workers who have privileges. The other part of the labour force consists of outsiders. Although insiders can differ from outsiders in many ways, insiders can generally be conceptualised as employees with permanent contracts who are labour union members, whereas outsiders are workers with fixed-term contracts who are not represented by labour unions. Therefore, labour unions are supposed to act in favour of the insiders. In this perspective, unions are in favour of high levels of EPL, but they oppose strong efforts on activation. ALMPs diminish the advantageous position of insiders relative to outsiders, because ALMPs improve the competitiveness of outsiders. According to the second argument, social partners act in favour of the interests of society as a whole. This approach has been called the ‘Olsonian’ approach to corporatism, after Mancur Olson (Rueda, 2007). In this theoretical perspective, both labour unions and employer organisations have incentives to maintain the reputation of being reasonable and representative (Teulings and Hartog, 1998). Under this approach, labour unions are supposed to support generous social policies and strong efforts on activation. To date, there is not much empirical research on the implementation of the whole flexicurity model and the role of social partners, but there is more empirical research on the policy instruments that are the pillars of flexicurity, namely employment protection legislation, unemployment benefits and ALMPs.

Rueda (2007) examined the variations in EPL across countries and over time, but he did not find a clear effect of corporatism. Emmenegger (2011) used a fuzzy set approach to analyse the cross-country variation in EPL and he found that a strong labour movement leads to more EPL.¹ It is not clear, however, whether this stems from labour unions or from left-wing political parties, since the index that has been used in this study comprises both. This is notable, since in many other studies both types of actors are included separately. Moreover, sometimes the issue examined is whether there is an interaction effect between the two types of actors in the policy-making process. Remarkably, these studies did not account for the differences in EPL with respect to workers with permanent or temporary contracts. It has been well documented that EPL

¹ Yet a strong labour movement does not appear to be a necessary condition.

reforms have regularly resulted in two-tier reforms, in which the employment protection for temporary contracts has been reduced, while the employment protection for permanent contracts has remained unchanged (Boeri and Garibaldi, 2007; Ochel, 2008; Nijboer and Van Vliet, 2009). Since insiders, employees with a permanent contract, are better organised and have access to political decision-making, through for instance tripartite institutions, they have been able to exert veto power during reforms. Hence, policy-makers have only succeeded in reforming EPL on temporary contracts. Interestingly, Eichhorst and Marx (2011) have argued recently that insiders may react to more flexibility for temporary jobs with more flexibility in their own segment in order to strengthen their competitiveness relative to flexible workers.

With respect to unemployment benefits, significant progress has been made in the measures for international comparative research. Building on the idea of the unemployment benefit replacement rates provided by the OECD (2010), Scruggs (2005) came up with the “Welfare state entitlements data set”, in which more refined measures are provided. These data were analysed by Allan and Scruggs (2004). Their results suggest that corporatism is positively associated with the levels of unemployment benefits. Formulated differently, the authors interpret these findings as being consistent with the view that strong unions and policy concertation tend to resist retrenchment, or retrench less. Analysing the impact of corporatism on the expenditure on unemployment benefits, Rueda (2007) did not find any direct effect of corporatism, but he found an interaction effect. When the level of corporatism is low, left-wing political parties yield a positive effect, while they do not in the case of a corporatist tradition of policy-making. Swank (2011) examines the impact of corporatism on the spending on unemployment benefits as well as Scruggs’s income replacement rate for unemployment benefits and he found for both measures a positive impact of corporatism.

Over the course of time, the amount of empirical work on ALMPs has grown steadily and so has the insight into the role of corporatism. Martin and Swank (2004) found that corporatist policy-making is strongly associated with shares of national income devoted to ALMPs. More recently, Swank (2011) found that political-economic institutions of (sector-) coordinated capitalism have a positive impact on spending on ALMPs. In line with these results, Van Vliet and Koster (2011) find a positive effect of the presence of tripartite councils on ALMP expenditure. Relying on fuzzy set qualitative comparative analyses, Vis (2011) qualifies the picture. She finds that in combination with rightist governments the presence of corporatism leads to higher spending on activation, while in the case of leftist governments, it is the absence of corporatism that leads to higher activation spending.

In summary, social partners play an important role in the implementation of flexicurity policies. The question is under what political-economic conditions the flexicurity model, in terms of a combination of flexible labour markets, generous unemployment benefits and a strong emphasis on ALMPs, becomes feasible. The synopsis of the literature presented above reveals that the overall picture seems to be a complicated one. A corporatist tradition of policy-making is related to high levels of EPL, generous unemployment support and strong efforts on ALMPs. More research is needed to find out whether and under what conditions reforms in the direction of the flexicurity model are feasible. Naturally, factors other than corporatism should be taken into account as well.

2.3 Interaction between labour market policies

The interaction between different labour-market policy instruments is an important factor in policy reforms. A single labour-market policy instrument is embedded in a large number of welfare state institutions in a country. This has conventionally been taken into account in the welfare regime literature in which welfare states are regarded and conceptualised as configurations of various policy instruments (Esping-Andersen, 1990). Yet in the comparative political-economy literature that deals with explanations for the variations in welfare state reforms across countries and over time, welfare state institutions are generally treated as isolated policy instruments. Most studies focus on a single policy instrument, for instance unemployment benefits, and the interrelationships with other policies such as EPL are not addressed. Still, this especially applies to quantitatively oriented studies in the comparative political-economy literature. After all, in case studies a broader context is usually taken into account.² One quantitative study that actually does include other labour market policies is that by Rueda (2007). In empirical models on expenditure on active and passive labour market policies, employment protection is included as an independent variable. The interaction between policy instruments is especially important in the case of flexicurity, since the key idea is that more income security will compensate the increased flexibility in employment protection. As a consequence, opposition from insiders could be overcome (Eichhorst and Konle-Seidl, 2005).

2.4 Focus on OECD countries

From an empirical viewpoint, most studies include Western OECD countries from the early 1980s to the early 2000s, which can probably be attributed to data availability. Although the new member states of the EU are also expected to implement flexicurity policies, they have not been included in the empirical literature on flexicurity. This raises the question of whether the findings in the existing comparative political-economy literature with respect to the explanations for the variation in the reforms of flexicurity policy instruments across countries and over time also hold for the new member states of the EU. After all, there is strong evidence that welfare state institutions and employment relations in Western European countries differ fundamentally from those institutions in Central and Eastern European countries (CEECs) (Draxler and Van Vliet, 2010). In addition, the labour market situation itself is challenging in the CEECs, given the high proportion of non-active persons of working age who are receiving long-term benefits with few activation incentives, in combination with low productivity and large numbers of informal sector workers (Viebrock and Clasen, 2009, p. 311).

3. The transitional labour market model

The concept of the TLM was introduced by Schmid in the 1990s (Schmid, 1998). An important argument starting the discussion about the TLM model was that traditional models had not led to full employment. According to Schmid's analysis, this is partly

² In quantitatively oriented studies, typically based on pooled time series cross-section regression analyses, country fixed effects are often included to control for other welfare state institutions. Hence, it is implicitly assumed that these welfare state institutions do not change over the course of time. This assumption does not seem very realistic.

because of the fact that labour markets are social institutions rather than commodity markets and thus need much more government intervention to run smoothly. Another reason for failing labour market models is that the world itself has changed, for example owing to globalisation, changing lifestyles and changes in household composition, and therefore the old models no longer suffice. As such, the underlying logic of the TLM closely relates to concepts concerning old and new (manufactured) risks (Beck, 1992; Pierson, 1996; Taylor-Gooby, 2004), active labour market policies (Calmfors, 1994) and labour market flexibility (Atkinson, 1984).

The TLM model offers a broad view of possible transitions that individuals may make during their life course. These individuals can be in different states between these transitions. These states are education, employment, household work, unemployment and retirement. Combining these states results in the following six potential transitions in which employment has a central place:

1. Education – employment
Before people decide whether to participate in the labour market, they will spend a certain amount of time in education. After receiving a certain degree, a large share tries to find a job. The transition from education to employment mostly centres around questions concerning the position of youth on the labour market.
2. Unemployment – employment
Whenever people are unfortunate enough to become unemployed, most of them try to find employment again. Here questions of labour market activation, welfare state dependence and individual work motivation play an important role. Furthermore, the ease of hiring someone is a relevant issue from the point of view of employees.
3. Household – employment
Those doing household work may decide to become active after a while. This may be the case when young children grow up and leave the house or when household members decide to rearrange their household division of labour. A major question in this respect is how people deal with human capital investments and the extent to which individuals are supported in such investments.
4. Employment – employment
Being active on the labour market does not necessarily mean that individuals are employed at the same place for their entire working life. Instead, they will move from one employer to another if that improves their position. In this regard, the main question is how easily people can move from one organisation to another.
5. Employment – unemployment
There may be different reasons for transitions from employment to unemployment. An important question here is how easily organisations can fire employees, which mainly results from institutional arrangements, such as the level of employment protection in a country.
6. Employment – retirement
Finally, people will move out of the labour market and into retirement. A plethora of factors at the institutional, organisational and individual levels influence the decision to retire.

With regard to the empirical state of the art of the TLM model, there is partly evidence on the ease of transitions in different countries (see for example Lassnigg (2005), who describes that evidence with regard to transitions from education to employment). Gathering a full account of the model requires integrating the distinct strands of literature into a single analysis. Such an approach will also seek to answer a number of questions that have not been resolved to date.

3.1 Distinguishing states

Conceptually, the TLM model builds on clearly distinguishable states and the transitions between these states. It is of both theoretical and empirical interest to investigate the extent to which the model holds in reality. It is very likely that individuals combine states rather than move from one to another. People doing household work can combine it with paid work and individuals can choose partial retirement instead of moving out of the labour market completely. Indeed, as this does not require clear-cut transitions but the ability to fulfil different roles, being multifunctional may increase the level of flexibility as well as the level of security.

3.2 Degree of change

Empirically, the question to be answered is how much change there actually is, since the model assumes that structural changes in the labour market force governments to leave old models behind and look for new solutions to the problems of today. Nevertheless, as long as these changes are only taken for granted and not considered critically themselves, these models run the danger of providing solutions for nonexistent problems.

3.3 Important actors

A final conceptual matter that is not discussed in the TLM context concerns the division of responsibilities and the ultimate outcomes of the model. Should the model contribute to full employment, to material wealth or perhaps to other, non-monetary policy goals like happiness? As it is now, the model is formulated from a policy point of view, with certain policy goals in mind. These goals have to be clarified to evaluate the state of the model. Furthermore, this also requires a better understanding of which actors are involved in the outcomes. At present, the main actors in the model seem to be policy-makers and individuals. Yet for the model to function smoothly the demand-side perspective also needs to be understood. Therefore, the behaviour of employers and organisations needs to be incorporated. Including these actors would enable us to say how the model works and for whom.

The conceptual discussion concerning the TLM shows that the concept is a mixture of the actual state of the economy and the labour market, the selected policy goals, views towards government intervention, and the preferences of individual and corporate actors concerning the demand and supply of labour. Fully understanding how and to what extent the TLM works and how it differs across countries requires insight into how the underlying aspects come into play. Hence, taking a myriad of factors into

account is required. First, as the TLM focuses on transitions on the labour market, the question is how easily people move from one state to another (for example, from unemployment to employment). As long as these transitions run smoothly there is little need for government intervention with regard to supporting these transitions. But if countries do face labour inflexibility, the question remains of what causes these rigidities. Are they, for example, the result of market failures, problems concerning market demand in certain economic sectors or inadequate institutions? Second, if a government recognises that there may be issues with regard to the labour market, the question is whether it will choose to intervene, which is closely related to how much leeway it is granted given public opinion and the ideological position of key actors. Still, even if governments choose to intervene, it is not clear beforehand the degree to which measures based on the TLM will be adopted. Finally, the functioning of the labour market not only refers to the way and the ease with which demand and supply meet one another on the labour market, but also to the preferences of organisations and individuals. With regard to labour market flexibility, organisations are mainly interested in rightsizing their workforce, gaining easy access to the human capital they require at a certain point in time. These preferences, however, do not necessarily match those of individuals supplying labour. Both economic necessity and cultural norms may be relevant underlying mechanisms here.

4. Trends and patterns

4.1 Trends and regulations related to TLM

In the conceptual discussion of TLM, we pointed out that it is necessary to distinguish among various factors, namely the actual labour situation in a country, government policies and individual preferences. Applying these distinctions, we next discuss a number of country differences.

Labour market situation

The actual transitions on the labour market can be evaluated using different indices about unemployment and exit from the labour market in terms of retirement. The level of unemployment shows how good or bad the labour market functions as a whole (Table 1). In addition, the level of long-term unemployment indicates how well the labour market is able to absorb labour market changes in the longer run (Table 2). Finally, the average exit age indicates when people make the transition from work to retirement (Table 3).

Table 1. Unemployment rate (%) per country, 2000–10

	2000	2002	2004	2006	2008	2010
Austria	3.6	4.2	4.9	4.8	3.8	4.4
Belgium	6.9	7.5	8.4	8.3	7	8.3
Bulgaria	16.4	18.2	12.1	9	5.6	10.2
Cyprus	4.9	3.6	4.7	4.6	3.6	6.3
Czech Republic	8.7	7.3	8.3	7.2	4.4	7.3
Denmark	4.3	4.6	5.5	3.9	3.3	7.4
Estonia	13.6	10.3	9.7	5.9	5.5	16.9
Finland	9.8	9.1	8.8	7.7	6.4	8.4
France	9	8.6	9.3	9.2	7.8	9.8
Germany	7.5	8.4	9.8	10.3	7.5	7.1
Greece	11.2	10.3	10.5	8.9	7.7	12.6
Hungary	6.4	5.8	6.1	7.5	7.8	11.2
Ireland	4.2	4.5	4.5	4.5	6.3	13.7
Italy	10.1	8.6	8	6.8	6.7	8.4
Japan	4.7	5.4	4.7	4.1	4	5.1
Latvia	13.7	12.2	10.4	6.8	7.5	18.7
Lithuania	16.4	13.5	11.4	5.6	5.8	17.8
Luxembourg	2.2	2.6	5	4.6	4.9	4.5
Malta	6.7	7.5	7.4	7.1	5.9	6.9
Netherlands	3.1	3.1	5.1	4.4	3.1	4.5
Norway	3.2	3.7	4.3	3.4	2.5	3.5
Poland	16.1	20	19	13.9	7.1	9.6
Portugal	4.5	5.7	7.5	8.6	8.5	12
Romania	7.3	8.6	8.1	7.3	5.8	7.3
Slovakia	18.8	18.7	18.2	13.4	9.5	14.4
Slovenia	6.7	6.3	6.3	6	4.4	7.3
Spain	11.1	11.1	10.6	8.5	11.3	20.1
Sweden	5.6	6	7.4	7.1	6.2	8.4
UK	5.4	5.1	4.7	5.4	5.6	7.8
US	4	5.8	5.5	4.6	5.8	9.6

Source: Eurostat (2011).

Table 2. Long-term unemployment (%), 2000–10

	2000	2002	2004	2006	2008	2010
Austria	1	1.1	1.4	1.3	0.9	1.1
Belgium	3.7	3.7	4.1	4.2	3.3	4.1
Bulgaria	9.4	12	7.2	5	2.9	4.8
Cyprus	1.2	0.8	1.2	0.9	0.5	1.3
Czech Republic	4.2	3.7	4.2	3.9	2.2	3
Denmark	0.9	0.9	1.2	0.8	0.4	1.4
Estonia	6.3	5.4	5	2.9	1.7	7.7
Finland	2.8	2.3	2.1	1.9	1.2	2
France	3.5	3	3.8	3.9	2.9	3.9
Germany	3.8	4	5.5	5.8	4	3.4
Greece	6.2	5.3	5.6	4.8	3.6	5.7
Hungary	3.1	2.5	2.7	3.4	3.6	5.5
Ireland	1.6	1.3	1.6	1.4	1.7	6.7
Italy	6.3	5.1	4	3.4	3.1	4.1
Japan	1.2	1.7	1.6	1.4	1.3	1.9
Latvia	7.9	5.5	4.6	2.5	1.9	8.4
Lithuania	8	7.2	5.8	2.5	1.2	7.4
Luxembourg	0.5	0.7	1	1.4	1.6	1.3
Malta	4.5	3.2	3.4	2.8	2.5	3.2
Netherlands	0.8	0.8	1.7	1.9	1.1	1.2
Norway	0.3	0.5	0.8	0.8	0.3	0.7
Poland	7.4	10.9	10.3	7.8	2.4	3
Romania	3.8	4.6	4.8	4.2	2.4	2.5
Slovakia	10.3	12.2	11.8	10.2	6.6	9.2
Slovenia	4.1	3.5	3.2	2.9	1.9	3.2
Spain	4.6	3.7	3.4	1.8	2	7.3
Sweden	1.4	1.2	1.4	1	0.8	1.5
UK	1.4	1.1	1	1.2	1.4	2.5
US	0.2	0.5	0.7	0.5	0.6	2.8

Source: Eurostat (2011).

Table 3. Average exit age from the labour force, 2001–09

	2001	2003	2005	2007	2008	2009
Austria	59.2	58.8	59.9	60.9	–	–
Belgium	56.8	58.7	60.6	61.6	–	–
Bulgaria	–	58.7	60.2	–	–	–
Cyprus	62.3	62.7	–	63.5	–	62.8
Czech Republic	58.9	60.1	60.6	60.7	60.6	60.5
Denmark	61.6	62.2	61	60.6	61.3	62.3
Estonia	61.1	60.8	61.7	62.5	62.1	62.6
Finland	61.4	60.4	61.7	61.6	–	61.7
France	58.1	60	59	59.4	59.3	60
Germany	60.6	61.6	–	62	61.7	62.2
Greece	–	62.7	61.7	61	61.4	61.5
Hungary	57.6	61.6	59.8	–	–	59.3
Ireland	63.2	62.9	64.1	–	–	–
Italy	59.8	61	59.7	60.4	60.8	60.1
Latvia	62.4	–	62.1	63.3	62.7	–
Lithuania	58.9	–	60	–	–	–
Luxembourg	56.8	57.4	59.4	–	–	–
Malta	57.6	58.8	58.8	–	59.8	60.3
Netherlands	60.9	60.5	61.5	63.9	63.2	63.5
Norway	63.3	62.8	63.1	64.4	64	63.2
Poland	56.6	57.9	59.5	59.3	–	–
Portugal	61.9	62.1	63.1	62.6	–	–
Romania	59.8	62.7	63	–	–	–
Slovakia	57.5	57.8	59.2	58.7	–	58.8
Slovenia	–	56.2	58.5	–	–	–
Spain	60.3	61.5	62.4	62.1	62.6	62.3
Sweden	62.1	63.1	63.6	63.9	63.8	64.3
Switzerland	63.9	63	62.5	63.5	63.7	63.5
UK	62	63	62.6	62.6	63.1	63

Source: Eurostat (2011).

Government policies

Active labour market policies are government policies that may help transitions on the labour market, from unemployment to employment, between jobs and from education to employment (see Table 4).

Table 4. ALMP expenditures (%), 1985–2005

	ALMP as a share of LMP					ALMP per unemployed				
	1985	1990	1995	2000	2005	1985	1990	1995	2000	2005
Australia	22.79	16.28	37.85	28.02	40.93	9.45	6.33	17.45	11.74	14.55
Austria	23.36	25.82	22.76	35.56	35.43	17.55	21.39	20.84	30.16	24.71
Belgium	26.42	27.56	27.28	27.66	24.47	22.85	29.85	22.14	35.83	29.01
Canada	24.89	20.57	29.96	35.15	32.25	11.42	11.64	11.58	10.63	8.19
Denmark	–	15.11	30.10	40.24	38.23	–	15.83	50.69	82.50	66.20
Finland	36.10	43.71	26.54	28.99	30.59	27.59	51.32	18.92	18.23	21.15
France	20.54	30.20	42.42	45.12	34.44	14.87	20.43	26.47	30.88	22.43
Germany	34.32	50.29	41.82	43.40	36.94	15.22	38.44	30.39	31.79	17.44
Greece	32.97	31.52	49.44	37.44	14.41	5.00	6.64	9.98	5.11	1.59
Ireland	23.98	38.55	42.61	54.71	41.40	16.99	21.56	27.28	45.36	27.37
Italy	–	27.76	27.84	58.26	53.57	–	4.76	5.74	12.86	17.33
Japan	–	50.38	37.71	31.66	43.12	–	30.53	18.90	11.23	11.04
Luxembourg	33.83	30.23	21.60	34.07	34.34	58.19	36.79	11.17	16.06	24.05
Netherlands	28.26	33.54	32.54	54.38	46.54	29.85	36.77	40.32	108.99	54.10
New Zealand	58.80	31.73	37.32	26.63	47.22	50.15	22.38	21.57	16.12	19.42
Norway	55.29	45.73	53.99	57.34	58.08	46.31	33.85	50.72	33.77	30.82
Portugal	–	60.45	34.58	48.07	–	–	21.30	14.80	30.30	17.26
Spain	10.66	19.84	11.89	25.27	25.97	4.17	12.11	4.54	10.83	17.60
Sweden	70.64	65.48	48.88	55.89	51.78	125.92	169.62	47.40	60.15	32.44
Switzerland	43.36	65.85	30.57	52.04	44.47	40.12	79.80	24.08	36.73	29.69
UK	25.29	43.69	32.09	51.04	67.26	12.77	16.27	9.96	12.79	22.37
US	41.19	34.05	34.03	39.64	28.74	7.96	7.86	6.40	7.68	4.71
Mean	34.04	36.74	34.26	41.39	39.53	28.69	31.61	22.33	29.99	23.34

Definitions: i) ALMP as a share of LMP – ALMP expenditures as a share of expenditures on all labour market policies, defined as the sum of active and passive (unemployment benefits) spending

ii) ALMP per unemployed – ALMP expenditures per unemployed person relative to GDP per capita

Source: Van Vliet and Koster (2011).



Individual preferences

The labour supply of individuals critically depends on the importance they attach to work. Over the years the centrality of work has been measured in international surveys (Table 5). In the *World Values Survey 2005*, work ethic was measured using the following five items: 1) to develop talents you need to have a job; 2) it is humiliating to receive money without having to work for it; 3) people who do not work turn lazy; 4) work is a duty towards society; and 5) work should always come first even if it means less spare time (answer categories range from “strongly disagree” (1) to “strongly agree” (5)) (World Values Survey Association, 2005).

Table 5. Work centrality per country

Australia	3.25
Canada	3.22
Chile	3.78
Finland	3.34
Germany	3.58
Italy	3.67
Japan	3.49
Mexico	3.64
Norway	3.52
Poland	3.84
Slovenia	3.70
South Korea	3.86
Spain	3.45
Sweden	3.08
Switzerland	3.48
Turkey	4.16
US	3.28
Total	3.54

Source: World Values Survey Association (2005).

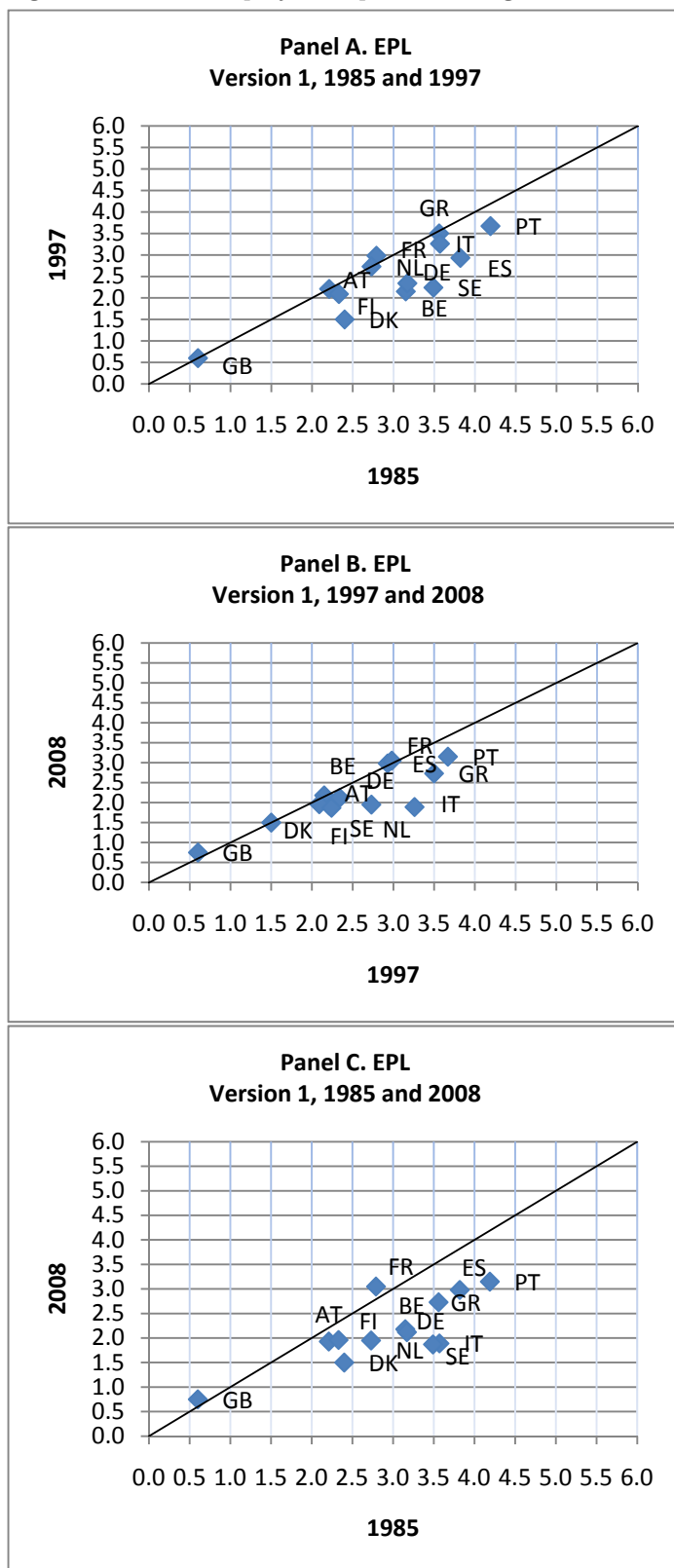
4.2 Employment protection legislation in the EU: Patterns and trends, 1985–2008

The strictness of the employment protection legislation has been measured with a number of indicators computed by the OECD following the methodology proposed by OECD (1999). These indicators capture the protection of regular employment and regulations on temporary work.

Figure 1 shows the strictness of overall EPL in EU countries over the period 1985–2008. It appears that there is significant variation in the overall EPL across EU countries. The strictness of the EPL has decreased in countries where the EPL was the highest initially (Portugal, Spain, Italy, Greece and Sweden) and has slightly increased in the countries where EPL was the lowest (the UK and Ireland). This fact suggests a convergence trend of EPL across EU countries over the period analysed.

Figures 2 and 3 show that a reduction in the strictness of EPL has taken place in most countries, particularly in the case of EPL for temporary contracts, with the exceptions of Ireland and the UK where the EPL for temporary contracts has increased slightly.

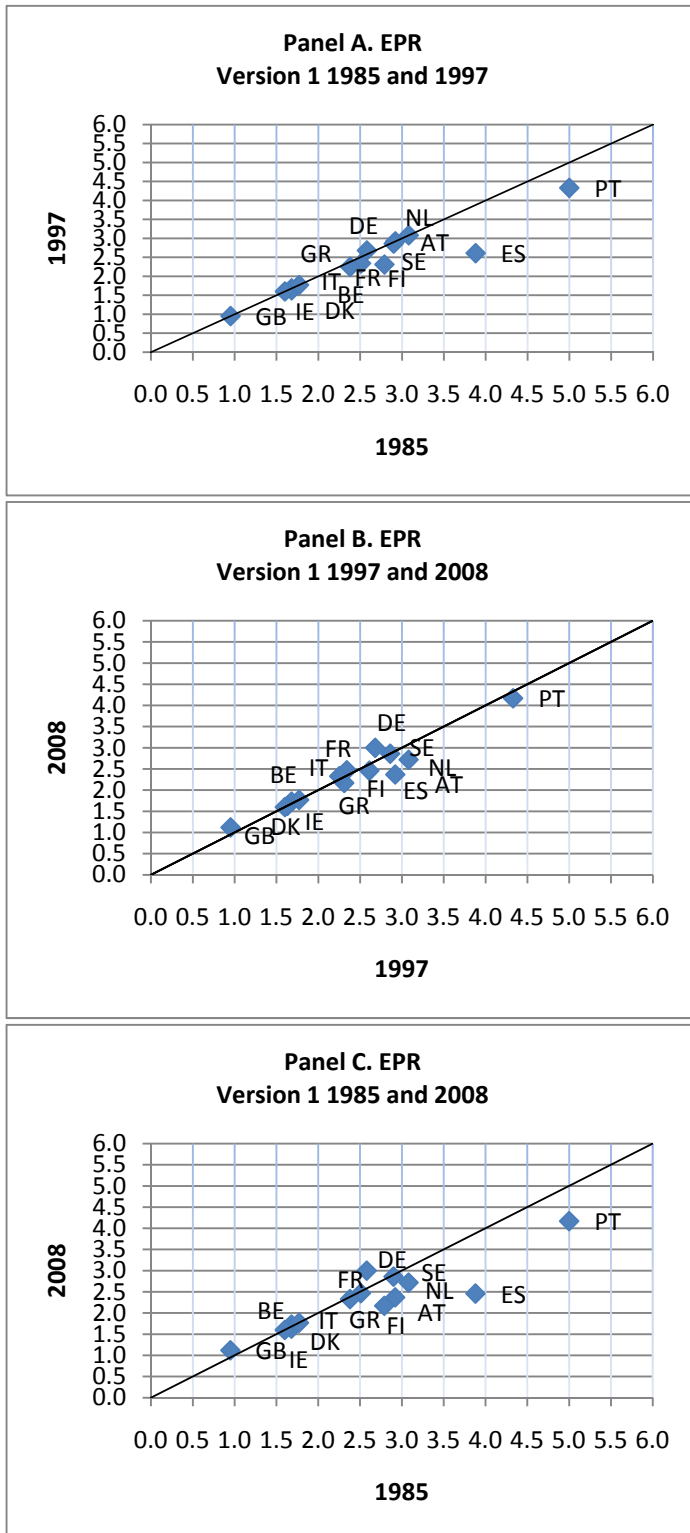
Figure 1. Overall employment protection legislation in EU countries, 1985–2008



Definition: EPL is a composite measure of employment protection consisting of the strictness of regulation and dismissal for regular, temporary and collective dismissal.

Data source: OECD (<http://stats.oecd.org/Index.aspx>).

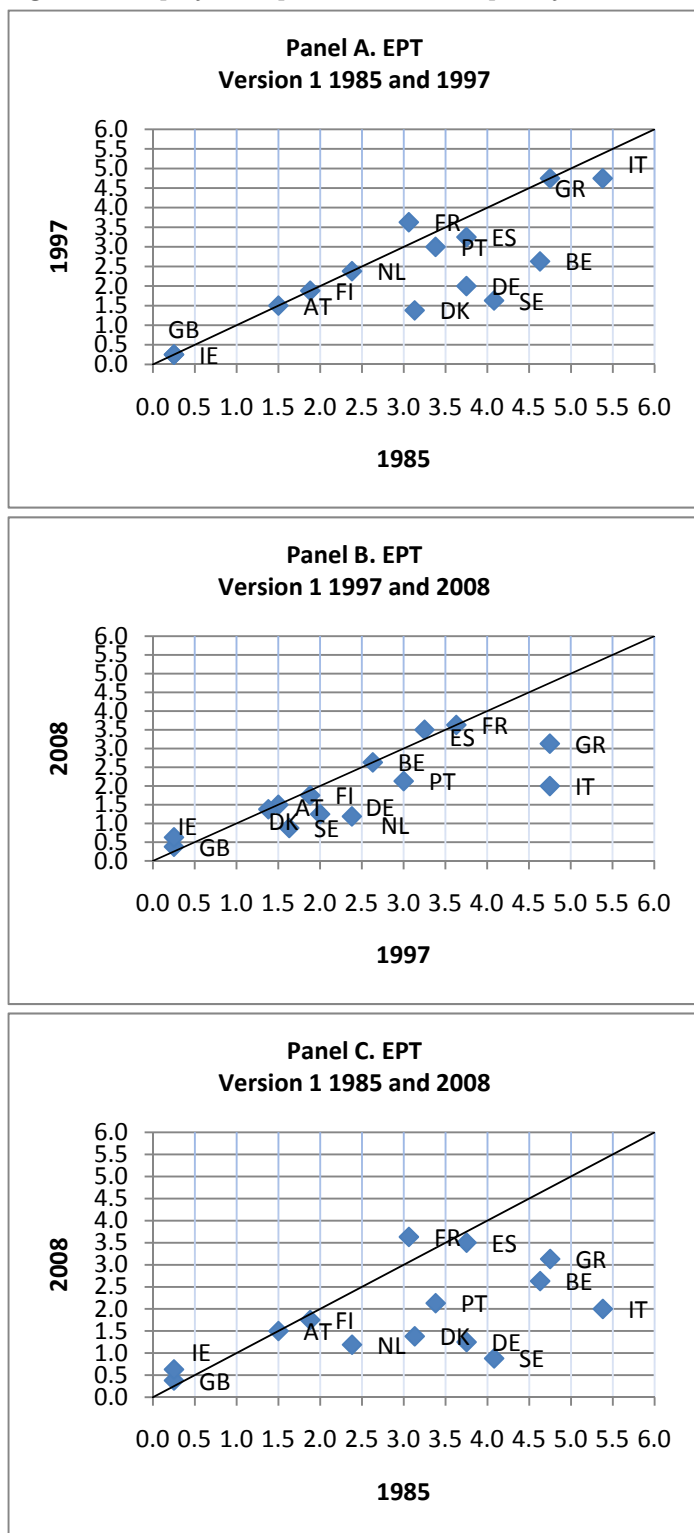
Figure 2. Employment protection for regular contracts (EPR) in EU countries, 1985–2008



Definition: EPR is a sub-indicator for the dismissal of employees on regular contracts. This is calculated as a weighted sum of i) procedural inconveniences of individual dismissals on regular contracts, ii) notice and severance pay for no-fault individual dismissal and iii) the difficulty of dismissal.

Data source: OECD (<http://stats.oecd.org/Index.aspx>).

Figure 3. Employment protection for temporary contracts (EPT) in EU countries, 1985–2008



Definition: EPT is a sub-indicator for the strictness of regulation on temporary contracts. This is calculated as a weighted sum of the strictness of regulation for i) temporary contracts and ii) fixed-term contracts.

Data source: OECD (<http://stats.oecd.org/Index.aspx>).

4.3 The effects of EPL on innovation and the adoption of new technologies, 1985–2008

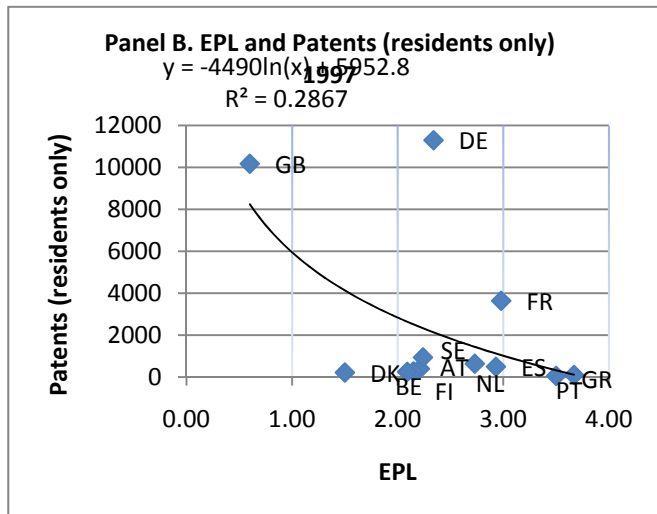
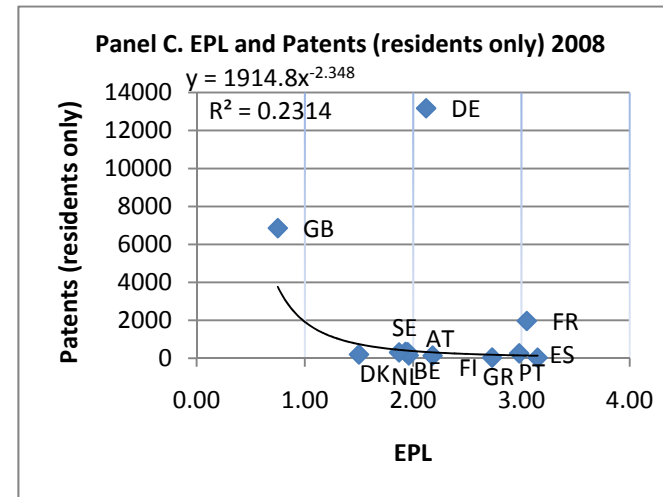
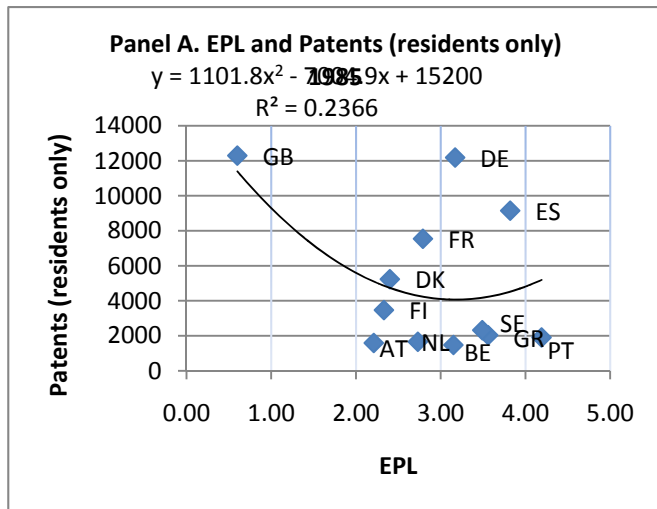
Employment protection legislation has been extensively analysed in relation to its effects on labour market performance, especially on employment and unemployment rates (Lazear, 1990; Blanchard and Wolfers, 2000; OECD, 2004; Nickell et al., 2005; Griffith et al., 2007). In recent years, there has been an increased interest in the impact of EPL on innovation, productivity and growth (Saint-Paul, 1997, 2002; Buchele and Christiansen, 1999; Akkermans et al., 2005; Acharya et al., 2009; Griffith and Macartney, 2010).

In theory, the effects of EPL on innovation and the adoption of new technologies are ambiguous and existing empirical evidence is not clear-cut. On the one hand, EPL increases job security and may foster workers' investment in innovation activities. On the other hand, EPL increases the adjustment costs firms face when they need to introduce technologically advanced innovations (Griffith and Macartney, 2010). Over the past two decades substantial policy reforms that liberalised product, labour and capital markets have been implemented in EU countries. Understanding how these policy reforms affect the decisions of firms to innovate and adopt new technologies is relevant for both research and policy-making in the context of the Europe 2020 strategy.

Figures 4 and 5 show that the relationship between innovation (using patent applications as a proxy) and EPL is non-linear, which suggests that it is conditioned by other factors, among which country characteristics are likely to play an important role. High levels of innovation performance are associated with both a low level of EPL (the UK) and a moderate level of EPL (Germany). Rigid EPL is associated with low innovation performance (Portugal, Spain, Italy and Greece). These are only partial correlations, however, and they do not capture the effects of other factors associated with innovation output, such as the level of development, human capital and the quality of institutions. To account for these factors an econometric analysis is necessary.

Figures 6-8 show the relationship between employment protection legislation and the adoption of information and communication technologies (ICT) measured by three indicators: the share of ICT in GDP, the extent of Internet usage and broadband penetration. Again, this relationship appears to be non-linear, with the best performance in terms of ICT adoption being associated with a moderate level of employment protection legislation.

Figure 4. Employment protection legislation and innovation in EU countries (residents only), 1985–2008

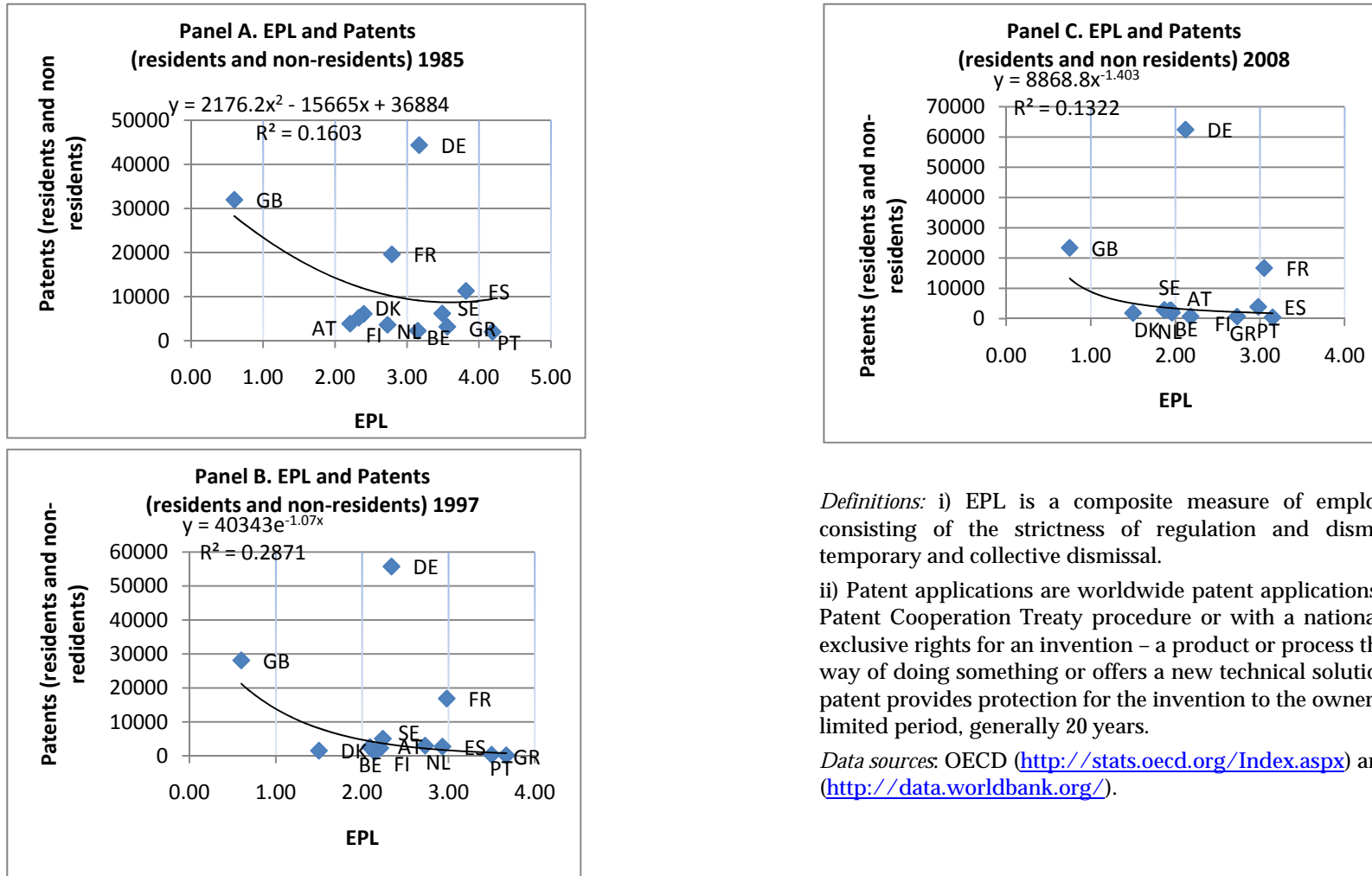


Definitions: i) EPL is a composite measure of employment protection consisting of the strictness of regulation and dismissal for regular, temporary and collective dismissal.

ii) Patent applications are worldwide patent applications filed through the Patent Cooperation Treaty procedure or with a national patent office for exclusive rights for an invention – a product or process that provides a new way of doing something or offers a new technical solution to a problem. A patent provides protection for the invention to the owner of the patent for a limited period, generally 20 years.

Data sources: OECD (<http://stats.oecd.org/Index.aspx>) and World Bank (<http://data.worldbank.org/>).

Figure 5. Employment protection legislation and innovation in EU countries (residents and non-residents), 1985–2008

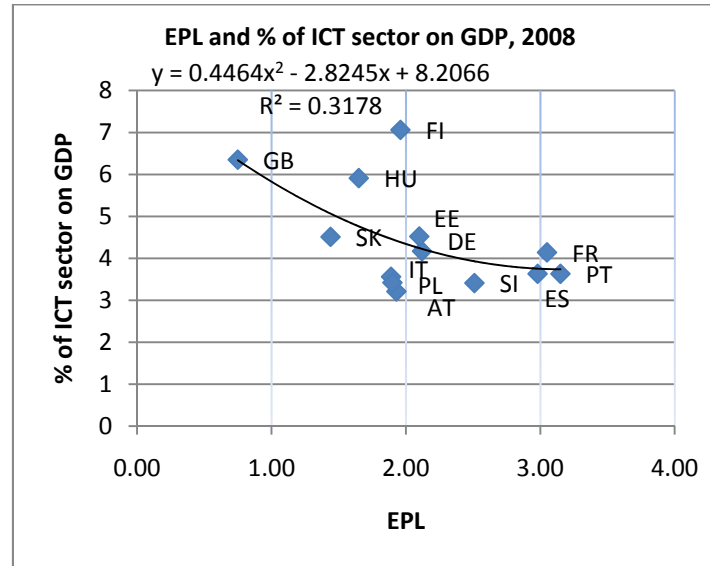


Definitions: i) EPL is a composite measure of employment protection consisting of the strictness of regulation and dismissal for regular, temporary and collective dismissal.

ii) Patent applications are worldwide patent applications filed through the Patent Cooperation Treaty procedure or with a national patent office for exclusive rights for an invention – a product or process that provides a new way of doing something or offers a new technical solution to a problem. A patent provides protection for the invention to the owner of the patent for a limited period, generally 20 years.

Data sources: OECD (<http://stats.oecd.org/Index.aspx>) and World Bank (<http://data.worldbank.org/>).

Figure 6. Employment protection legislation and the share of the ICT sector in GDP, EU countries, 2008

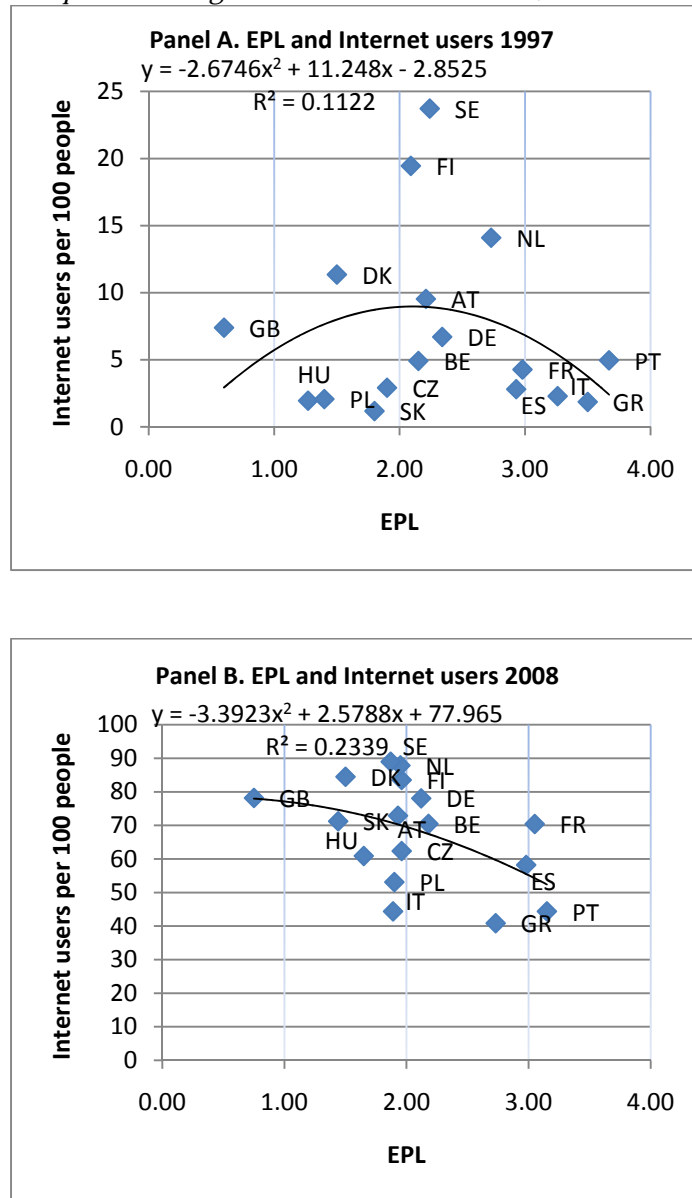


Definitions: i) EPL is a composite measure of employment protection consisting of the strictness of regulation and dismissal for regular, temporary and collective dismissal.

ii) The share of the ICT sector as a percentage of GDP is measured as value added at factor cost in the ICT sector, as a percentage of total value added at factor cost.

Data sources: OECD (<http://stats.oecd.org/Index.aspx>) and Eurostat (<http://ec.europa.eu/eurostat>).

Figure 7. Employment protection legislation and Internet users, EU countries, 1997 and 2008

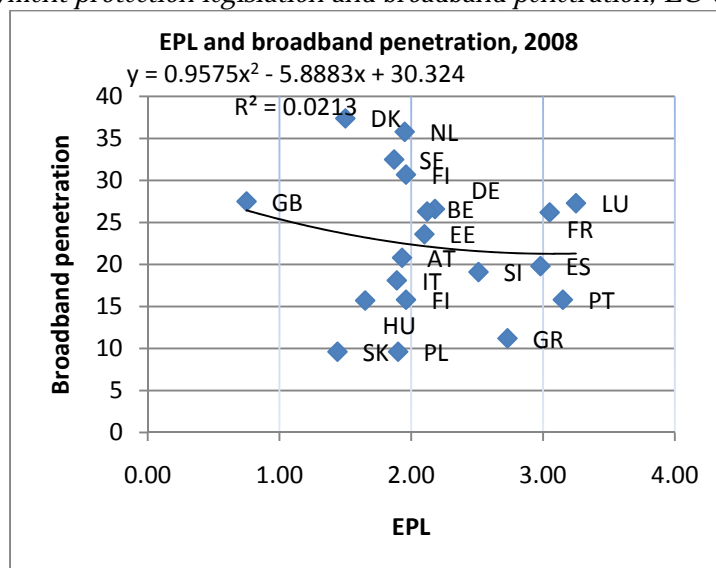


Definitions: i) EPL is a composite measure of employment protection consisting of the strictness of regulation and dismissal for regular, temporary and collective dismissal.

ii) Internet users are measured per 100 persons.

Data sources: OECD (<http://stats.oecd.org/Index.aspx>) and World Bank (<http://data.worldbank.org/>).

Figure 8. Employment protection legislation and broadband penetration, EU countries, 2008



Definitions: i) EPL is a composite measure of employment protection consisting of the strictness of regulation and dismissal for regular, temporary and collective dismissal.

ii) Broadband penetration is measured as the number of broadband access lines per 100 inhabitants.

Data sources: OECD (<http://stats.oecd.org/Index.aspx>) and Eurostat (<http://ec.europa.eu/eurostat>).

5. Research agenda

To adjust economies to economic, demographic and socio-ecological developments, labour markets have been and will continue to be reformed in many European and other Western countries. In the EU, the most important labour market models that have been proposed seem to be flexicurity and the transitional labour market.

To date, the literature on flexicurity is rather conceptual and theoretical. More empirical research is needed to understand how and why typical flexicurity policies – such as employment protection legislation, unemployment benefit schemes and active labour market policies – vary across countries and over time. In the reform of these policies, social partners play an important role, but it remains questionable whether social partners will support combinations of low levels of EPL and generous unemployment benefits. This is especially the case for the CEECs, given the gaps in the empirical literature on labour market policies for these countries. Furthermore, the low productivity rates are also a reason to concentrate on the new EU member states. Qualitative and quantitative empirical research could contribute to filling the gaps in the literature. Therefore, the first deliverable of this Work Package (D6.1) will provide an explorative description of the labour relations and labour market institutions in a relatively large number of CEECs. Subsequently, D6.2 will provide a number of more focussed country studies concerning the role of labour relations in the CEECs. In D6.3, we will look at explanations for the variations in labour market policies across countries and over time. The intended contribution of this deliverable is to examine whether and how the variations in labour relations can explain the variations in labour-market policy reforms across countries and over time, and to what degree the

relationships in the older EU member states are comparable with those in the new member states.

With regard to TLMs, the original conceptualisation provides a good starting point for discussion, but also leaves considerable room for improvement. The concept of the TLM model can be developed in more detail when a number of empirical questions are answered, which we aim at doing in D6.5. First, some of the underlying factors and mechanisms need to be further explained. In the end, transitions are made by individuals and the transitions reflect their preferences and decisions. Therefore, these decisions need to be made explicit in the models. Moreover, policies regarding labour markets result from governments' decisions related to their preferences and their leeway to change the present situation. Again, information about these actors needs to be taken into consideration. Taken together, the suggestions made in this paper may help to develop the TLM concept in more detail.

Finally, we have discussed the relationship between EPL, innovation and the adoption of new technologies. Understanding the extent to which firms, industries and countries are likely to benefit from recent structural reforms introduced in EU countries, including product and labour market deregulation, is relevant and important for both research and policy-making. For this purpose, we will carry out a more in-depth econometric analysis to be delivered in D6.4, to account for other factors related to innovation and the adoption of new technologies, including human capital, absorptive capacity and the quality of institutions.

References

- Acharya, V., R. Baghai-Wadji and K. Subramarian (2009), *Labour Laws and Innovation*, CEPR Discussion Paper No. 7171, CEPR, London (www.cepr.org).
- Akkermans, D., C. Castaldi and B. Los (2005), "Do 'Liberal Market Economies' Really Innovate More Radically than 'Co-ordinated Market Economies'? Hall and Soskice Reconsidered", *Research Policy*, Vol. 38 No. 1, pp. 181-191.
- Atkinson, J. (1984), *Flexibility, uncertainty and manpower management*, IMS Report No. 89, IMS, Brighton.
- Allan, J.P. and L. Scruggs (2004), "Political Partisanship and Welfare State Reform in Advanced Industrial Societies", *American Journal of Political Science*, Vol. 48, No. 3, pp. 496-512.
- Beck, U. (1992), *Risk society: Towards a new modernity*, New Delhi: Sage.
- Blanchard, O. and J. Wolfers (2000), "The Role of Shocks and Institutions in the Rise of European Unemployment: The Aggregate Evidence", *The Economic Journal*, Vol. 113, No. 462, pp. C1-C33.
- Boeri, T. and P. Garibaldi (2007), "Two Tier Reforms of Employment Protection: A Honeymoon Effect?", *The Economic Journal*, Vol. 117, No. 521, pp. F357-F385.
- Boeri, T., J.I. Conde-Ruiz and V. Galasso (2006), *The Political Economy of Flexicurity*, FEDEA Working Paper No. 2006-15, FEDEA, Madrid.

- Boeri, T., P. Cahuc, S. Crnkovic, C. Kollonay-Lehoczky and T. Wilthagen (2007), *Flexicurity Pathways, Turning Hurdles into Stepping Stones*, Report by the European Expert Group on Flexicurity, Brussels.
- Buchele, R. and D. Christiansen (1999), "Employment and Productivity Growth in Europe and North America: The Impact of Labour Market Institutions", *International Review of Applied Economics*, Vol. 13, No. 3, pp. 313-332.
- Calmfors, L. (1994), *Active labour market policy and unemployment: A framework for the analysis of crucial design features*, OECD Economic Studies No. 22, OECD, Paris.
- Draxler, J. and O. van Vliet (2010), "European Social Model: No Convergence from the East", *Journal of European Integration*, Vol. 32, No. 1, pp. 115-135.
- Eichhorst, W. and R. Konle-Seidl (2005), *The Interaction of Labor Market Regulation and Labor Market Policies in Welfare State Reform*, IZA Discussion Paper No. 1718, IZA, Bonn.
- Eichhorst, W. and P. Marx (2011), "Reforming German labour market policies: A dual path to flexibility", *Journal of European Social Policy*, Vol. 21, No. 1, pp. 73-87.
- Emmenegger, P. (2011), "Job security regulations in Western democracies: A fuzzy set analysis", *European Journal of European Research*, Vol. 50, No. 3, pp. 336-364.
- Esping-Andersen, G. (1990), *The Three Worlds of Welfare Capitalism*, Princeton: Princeton University Press.
- European Commission (2006), *Employment in Europe 2006*, Luxembourg: Office for Official Publications of the European Communities.
- (2007a), *Towards Common Principles of Flexicurity: More and Better Jobs through Flexibility and Security*, Luxembourg: Office for Official Publications of the European Communities.
- (2007b), *Employment in Europe 2007*, Luxembourg: Office for Official Publications of the European Communities.
- Eurostat (2011), "Population and social conditions", Brussels.
- Griffith, R. and G. Macartney (2010), *Employment Protection Legislation, Multinational Firms and Innovation*, CEPR Discussion paper No. 7628, CEPR, London.
- Griffith, R., R. Harrison and G. Macartney (2007), "Product Market Reforms, Labour Market Institutions and Unemployment", *The Economic Journal*, Vol. 117, No. 519, pp. C142-C166.
- Lassnigg, L. (2005), *Lifelong learning, school to work and labour market transitions*, TLM.net Working Paper, Amsterdam.
- Lazear, E.P. (1990), "Job Security Provisions and Employment", *Quarterly Journal of Economics*, Vol. 55, pp. 699-726.
- Lindbeck, A. and D.J. Snower (2001), "Insiders versus Outsiders", *Journal of Economic Perspectives*, Vol. 15, No. 1, pp. 165-188.
- Madsen, P.K. (2007), "Flexicurity – Towards a Set of Common Principles?", *International Journal of Comparative Labour Law and Industrial Relations*, Vol. 23, No. 4, pp. 525-542.

- Martin, C. and D. Swank (2004), “Does the Organization of Capital Matter? Employers and Active Labour Market Policy at the National and Firm Levels”, *American Political Science Review*, Vol. 98, No. 4, pp. 593-611.
- Nickell, S., L. Nunziata and W. Ochel (2005), “Unemployment in the OECD since the 1960s: What Do We Know?”, *The Economic Journal*, Vol. 115, pp. 1-27.
- Nijboer, H. and O. van Vliet (2009), “Flexicurity in the European Union: Flexibility for Outsiders, Security for Insiders”, Paper prepared for the second ASPEN/ETUI – REHS Conference in Brno, Czech Republic, 20-21 March.
- Ochel, W. (2008), *The Political Economy of Two-Tier Reforms of Employment Protection in Europe*, CESIFO Working Paper No. 2461, CESIFO, Munich.
- OECD (1999), *OECD Employment Outlook*, OECD, Paris.
- (2004), *OECD Employment Outlook*, OECD, Paris.
- (2010), *Benefits and Wages: OECD Indicators*, Edition 2006, OECD, Paris.
- (2011), *Labour Force Statistics*, OECD, Paris.
- Pierson, P. (1996), “The new politics of the welfare state”, *World Politics*, Vol. 48, No. 2, pp. 143-179.
- Rueda, D. (2007), *Social Democracy Inside Out: Partisanship and Labor Market Policy in Industrialized Democracies*, Oxford: Oxford University Press.
- Saint-Paul, G. (1997), “Is Labour Rigidity Harming Europe’s Competitiveness? The Effect of Job Protection on the Pattern of Trade and Welfare”, *European Economic Review*, Vol. 41, pp. 499-506.
- (2002), “Employment Protection, International Specialization and Innovation”, *European Economic Review*, Vol. 46, Nos. 3-5, pp. 375-395.
- Schmid, G. (1998), *Transitional Labour Markets: A New European Employment Strategy*, WZB Discussion Paper, WZB, Berlin.
- Scruggs, L.A. (2005), *Welfare State Entitlements Data Set: a Comparative Institutional Analysis of Eighteen Welfare States*, Version 1.1.
- Swank, D. (2011), “Activating Workers? The Political Economy of Active Social Policy in Postindustrial Democracies”, *Review of the Sociology of Work* (forthcoming).
- Taylor-Gooby, P. (ed.) (2004), *New risks, new welfare: The transformation of the European welfare state*, Oxford: Oxford University Press.
- Teulings, C. and J. Hartog (1998), *Corporatism or competition? Labour contracts, institutions and wage structures in international comparisons*, Cambridge: Cambridge University Press.
- Van Vliet, O. and F. Koster (2011), “Europeanisation and the Political Economy of Active Labour Market Policies”, *European Union Politics*, Vol. 12, No. 2, pp. 217-239.
- Viebrock, E. and J. Clasen (2009), “Flexicurity and welfare reform: A review”, *Socio-Economic Review*, Vol. 7, No. 2, pp. 305-331.

- Vis, B. (2011), "Under which conditions does spending on active labour market policies increase? An fsQCA analysis of 53 governments between 1985 and 2003", *European Political Science Review*, Vol. 3, No. 2, pp. 229-252.
- Wilthagen T., and F. Tros (2004), "The Concept of 'Flexicurity': A New Approach to Regulating Employment and Labour Markets", *Transfer*, Vol. 10, No. 2, pp. 166-186.
- World Values Survey Association (2009), *World Values Survey 2005*, Official Data File v.20090901, Aggregate File Producer: ASEP/JDS, Madrid.



About NEUJOBS

NEUJOBS is a research project financed by the European Commission under the 7th Framework Programme. Its objective is to analyse likely future developments in the European labour market(s), in view of four major transitions that will impact employment - particularly certain sectors of the labour force and the economy - and European societies in general. What are these transitions? The first is the **socio-ecological transition**: a comprehensive change in the patterns of social organisation and culture, production and consumption that will drive humanity beyond the current industrial model towards a more sustainable future. The second is the **societal transition**, produced by a combination of population ageing, low fertility rates, changing family structures, urbanisation and growing female employment. The third transition concerns **new territorial dynamics** and the balance between agglomeration and dispersion forces. The fourth is a **skills (upgrading)** transition and its likely consequences for employment and (in)equality.

Research Areas

NEUJOBS consists of 23 work packages organised in six groups:

- **Group 1** provides a conceptualisation of the **socio-ecological transition** that constitutes the basis for the other work-packages.
- **Group 2** considers in detail the main drivers for change and the resulting relevant policies. Regarding the drivers we analyse the discourse on **job quality**, **educational** needs, changes in the organisation of production and in the employment structure. Regarding relevant policies, research in this group assesses the impact of changes in **family composition**, the effect of **labour relations** and the issue of financing transition in an era of budget constraints. The regional dimension is taken into account, also in relation to **migration** flows.
- **Group 3** models economic and employment development on the basis of the inputs provided in the previous work packages.
- **Group 4** examines possible employment trends in key sectors of the economy in the light of the transition processes: energy, health care and goods/services for the **ageing** population, **care services**, housing and transport.
- **Group 5** focuses on impact groups, namely those vital for employment growth in the EU: **women**, the **elderly**, immigrants and **Roma**.
- **Group 6** is composed of transversal work packages: implications NEUJOBS findings for EU policy-making, dissemination, management and coordination.

For more information, visit: www.neujobs.eu

Project coordinator: Miroslav Beblavý (Miroslav.Beblavy@ext.ceps.eu)