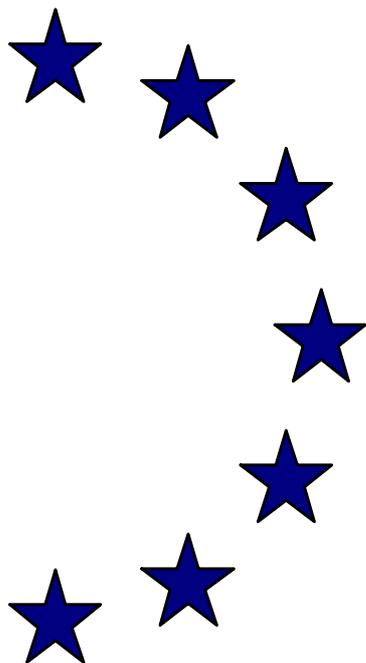


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by

Alfonso Arpaia, Declan Costello,
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Directorate-General for Economic and Financial Affairs

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TRACKING LABOUR MARKET REFORMS IN THE EU MEMBER STATES: AN OVERVIEW OF REFORMS IN 2004 BASED ON THE LABREF DATABASE

Alfonso Arpaia, Declan Costello, Gilles Mourre and Fabiana Pierini

European Commission¹

ABSTRACT

The paper examines the rationale for creating a database on labour market reforms and looks at the value-added of LABREF compared with existing datasets. In doing so, it considers recent developments in the economic literature as regards the design of labour market institutions. After a description of the coverage and structure of the database and of the information contained therein, the paper provides a summary overview of reforms enacted by EU Member States in 2004. On the base of the qualitative information in the database, the paper builds simple indicators of reform intensity and makes a tentative characterisation of the reforms strategy implemented by the Member States in 2004.

Directorate General for Economic and Financial Affairs - Labour Market Unit. e-mail:

alfonso.arpaia@cec.eu.int; declan.costello@cec.eu.int; gilles.mourre@cec.eu.int;

fabiana.pierini@cec.eu.int. The views expressed in this paper are those of the authors only. No responsibility for them should be attributed to the European Commission. Sections of the text may be quoted provided that full credit is given to the source.

1. Introduction

For some time, the European Commission's Directorate General for Economic and Financial Affairs has been working with the Labour Market Working Group (LMWG) attached to the Economic Policy Committee (EPC) to develop a more effective framework for the surveillance of labour markets and for analysing the impact of reforms on labour market performance. The aim of this joint effort is to support work carried out in the framework of EU economic policy coordination processes, and to improve the understanding of labour markets and labour market institutions as part of general economic surveillance of Member States' economies. The motivation comes from the growing interest of economic literature on the relationship between labour market institutions and labour market performance. It is now widely recognised that "*the labour market will not function well without proper institutions*"², that is, without an appropriate mix of established arrangements affecting the functioning of the labour market and shaped by the policy strategies instituted and enforced by governments and relevant collective actors³.

While considerable efforts have been made to establish comparable datasets on labour market institutions, the information provided by available qualitative indicators on time-varying labour market institutions is far from exhaustive. Existing databases mainly focus on the aggregate characteristics of the institutional variables and often lack timeliness or comprehensiveness. The need for improved institutional databases has been underlined by many authors who argue that the lack of well developed data has not allowed a full analysis of the multiple and complex linkages between labour institutions and labour market performance⁴.

In light of these considerations, DG ECFIN has, together with the LMWG, established a database of those reform measures which are intended to modify relevant labour market institutions in the EU-25. The LABREF database⁵ was launched in December 2005. It systematically records, on an annual basis, information on reforms that are likely to have an impact on labour market performance⁶. The LABREF database is conceived as an instrument to provide information on the design of reforms, their scope and their durability. As such, it focuses on selected characteristics of reform measures and provides information on their expected implementation phase. Moreover, the database enables tracking reforms by country, by policy area and by one or more key characteristics of the reform design, thus allowing for cross-country analysis on the number and type of reforms enacted in a particular year, as well as for covering a longer time horizon.

The paper is organised as follows. Section 2 examines the rationale for creating a database on labour market reforms and looks at the value-added of LABREF compared with existing

² Blanchard (2002, p.1).

³ For a definition of labour market « institutions » and « policies » see Betcherman (2000).

⁴ See, for instance, Dreger, C., R. Ramos and J. Surinach (2005), IMF (2003) and Gomez-Salvador R, J. Messina and G. Vallanti (2004).

⁵ The database can be freely accessed at: http://europa.eu.int/comm/economy_finance/indicators/labref_en.htm

⁶ Obviously, the link between labour market reforms and performance is not direct, as, for instance, legislative acts are the first step and are usually followed by implementation decrees. Hence, the database covers only the first layer of the relationship between policies and performance.

datasets. In doing so, it considers recent developments in the economic literature as regards the design of labour market institutions. Section 3 describes the coverage and structure of the database and the information contained therein. Section 4 provides a summary overview of reforms enacted by EU Member States in 2004. As such, it is illustrative of the potential use of the database, which will be updated annually. There are also plans to backdate the information in LABREF to 1995 for EU15 countries and to 2000 for EU10 countries. Section 5 provides a preliminary characterisation of the labour market reforms enacted in the Member States in 2004.

2. The value-added of the LABREF database

2.1. The theoretical context: the crucial but complex role of labour market institutions in labour market performances

Since the second half of the 1990s, there has been a growing interest among economic researchers in the relationship between labour market institutions and labour market performance⁷. This starts from the recognition that the assumptions behind the theoretical model of a competitive economy (complete markets, perfect information, atomistic and homogeneous agents and perfect competition) are often violated where labour markets are concerned⁸.

A more realistic description of labour markets takes into account wage and price formation in imperfectly competitive markets, where employment is determined by the interplay between a price curve and a wage bargaining curve and nominal wages are the result of negotiations between employers and employees. From this perspective, labour market institutions influence the stock of employment and unemployment by (i) modifying the wage formation mechanisms, (ii) by changing the price elasticity of product demand, and (iii) by stimulating technological progress⁹. Moreover, when looking at labour market performance as the outcome of a matching process between unemployed and job vacancies, search and matching models emphasise the presence of the heterogeneity of workers and jobs, of imperfect information about the characteristics of potential employers and employees and of restrictions on labour mobility that influence job creation and job destruction¹⁰. Both stocks and flows approaches show that labour market institutions - such as unemployment and welfare-related benefits, the extent of coordination and centralisation of wage bargaining, the nature of labour market regulation and of labour taxation - affect firms' hiring and firing decisions and individuals' readiness and willingness to take up a job. They also affect the extent to which unemployment reins in inflationary pressures.

⁷ See among others: Nickell (1997), Blanchard and Wolfers (2000); Kahn (2000), Bertola, Blau and Kahn (2001), Blanchard and Portugal (2001), Besley and Burgess (2004), Neumark and Wascher (2004), Bertola (2004) and Blanchard (2004).

⁸ See Blanchard (2005).

⁹ For a complete argumentation and review of literature, see the European Commission (2004), Chapter 3 and IMF (2003), Chapter 4.

¹⁰ For a description of the *stock* and *flows approaches* to equilibrium employment see Blanchard (2005).

Although a full consensus on the role of each institution has not been achieved, empirical evidence broadly suggests that institutions can explain a significant share of cross-country differences in labour market performance. Researchers also agree on the need to look at the whole configuration of labour market institutions to take account of the role played by their multiple interactions¹¹ on labour market outcomes. This should be a precondition for evaluating (and reforming) labour market institutions¹².

More generally, it is increasingly acknowledged that the effects of different policies and institutions on the labour market are neither simple nor univocal. Not only the interactions among institutions, but also their interactions with other variables such as economic growth, demographic patterns or technological developments - as well as with political changes motivated by non-economic reasons - matter for labour market performance¹³. Such interactions are important to understand whether identical reforms in two different countries will or will not have similar effects and whether wide-ranging reforms will be more effective than piecemeal measures. Finally, variations among labour market outcomes also depend on the efficiency of the enforcement and implementation.

The recognition of the multidimensionality of labour market institutions and of the existence of complementarities among them leads to the following considerations:

- since labour market institutions do not work in isolation, a comprehensive approach is needed in the macroeconomic evaluation of reforms modifying such institutions, which takes account of both the interaction between labour market institutions and country specific circumstances;
- reforms themselves need to be comprehensive in order to be effective and to generate better outcomes. Reforms which tackle more than one policy field are more likely to create an institutional setting conducive to high employment growth and low unemployment, because coordinated changes in related policy areas can cause mutually reinforcing effects on labour market dynamics, while, on the other hand, absence of complementary reforms in adjacent policy areas can be at the origin of disappointing effects (Eichhorst, W. and R. Kolne-Seidl (2005));¹⁴
- the quality of the reform design of labour market institutions matters for the performance of the labour market and of the economy in general.¹⁵ Reforms can be

¹¹ See for all Belot and van Ours (2001, 2004), IMF (2003) and Boeri (2005).

¹² See Eichhorst, W. and R. Konle-Seidl (2005).

¹³ See Blanchard and Wolfers (2000).

¹⁴ However, a gradual approach can overcome the resistance to comprehensive reforms which entail some uncertainty on the transition costs either real or perceived by those agents involved (Dewatripont and Roland (1995)).

¹⁵ A review of literature can be found in European Commission (2004), Chapter 3, and in Arpaia and Mourre (2005).

improved by appropriate strategies that exploit positive complementarities between institutions¹⁶;

- while useful insights can be drawn by making cross-country comparisons over a short time horizon, looking at time-series allows for a wider set of indicators to be used which go beyond the simple tracking of reforms. This enables more comprehensive analyses and assessments of reform strategies to be made - by looking for instance at the coherence and comprehensiveness of reforms in different areas, at the complementarities across reforms, at whether reforms in one year are offset by reforms later on. A longer time horizon can also be used in order to carry out analysis on the actual impact of reforms on labour market outcomes¹⁷.

These considerations have important bearings on:

- the process for tracking/monitoring labour market reforms: the literature underlines the importance to move beyond the listing of reform measures, an approach which is essentially static, descriptive and takes little account of the importance of interactions between reforms. It recommends instead focusing on certain “desirable” characteristics of the reform design¹⁸;
- the assessment of the impact of labour market reform on labour market outcomes: the literature underlines the complexity of the challenge.¹⁹ To examine whether a policy reform is successful, one has to address the question “what would have happened to its objective(s) if the policy intervention had not been taken place?” The construction of a counterfactual is at the core of the policy evaluation problem. To evaluate the capacity of a labour market reform to attain a well-defined objective, changes in one indicator should ideally identify changes in one policy only. In practice, this is not an easy task for several reasons. Firstly, when policy changes concern the nature of labour market regulation, these changes are quantifiable only with great difficulty or considerable delays. Secondly, when a policy is multidimensional, the information provided by one indicator only does not suffice²⁰. Thirdly, information provided by changes in one indicator is not sufficient to evaluate the policy direction when the change in the indicator reflects both the exogenous policy interventions and endogenous developments. Both (micro- and macro-) evaluation studies require detailed information on the characteristics of all measures likely to have an impact on labour market performance.

¹⁶ Positive interactions can for instance be developed by a) exploiting the role of incentives to work and participate in the labour market; b) targeting policies measures to those at risks of inactivity or of social exclusion; and c) improving the functioning of policy implementing institutions.

¹⁷ As an example, this type of information could be useful when carrying out cross-sectional analysis on specific configurations of labour market institutions (e.g. examining whether the rise in employment rates of older workers is linked to tighter access to early retirement schemes).

¹⁸ For instance, for a better understanding of the reforms strategies chosen/adopted at the country level it is important to consider the side of the labour market likely to be affected by certain reforms (e.g. labour supply, labour demand, matching, etc).

¹⁹ This paragraph draws upon Fertig, M. and Kluve, J. (2004) and on Blundell, R. and Costa Dias M. (2000).

²⁰ For example, a high net replacement rate with low duration and low coverage provide different incentives than the same replacement rate with high duration and high coverage.

2.2. *Improving existing tools and developing complementarities with other databases and information sources*

2.2.1. *Existing datasets at international level*

These considerations point to the need to conduct more in-depth analysis on the interaction between different sets of policies and labour market institutions. The availability of systematic and comprehensive information on reform measures affecting the design of labour market institutions then becomes a precondition for a proper understanding of the functioning of the labour market. The importance attached to systematically collecting information on labour market institutions is not new to the economic literature. International organisations²¹ and academics have already assembled databases on labour market regulations and labour market institutions.

Existing datasets can be divided into two broad categories. A first type collects information on enacted reforms, often with the aim of developing indices measuring the reform effort/intensity in different policy areas on the basis of predefined criteria (*Descriptive databases*). Based on the collected information, a second type of dataset develops indices measuring the overall “stringency” of certain institutions or of the reform intensity (*Indicator based databases*). This type of indicators is more related to the “stock” of existing interventions rather than to the “flows” of new measures.²²

However, existing datasets often only cover selected aspects of the labour markets’ institutional structure so that a comprehensive picture of reforms is often missing. In addition, they rarely cover all EU25 Member States, nor are they regularly updated, so as to provide timely enough information for the policy requirements at EU level. A common characteristic of most existing databases is that they concentrate on the aggregate qualitative aspects of labour market institutions/reforms by providing quantifiable indicators on the strictness of a given institution or the intensity of its reform process. However, they usually do not provide a detailed description of the characteristics of such institutions or of changes that occur over time (enacted reforms).

2.2.2. *Descriptive databases*

A simple collection of reform measures is provided by the database recently developed by the International Labour Organisation (ILO), which covers the fields of minimum wages, maternity protection and working time²³. The database includes information on legal

²¹ See Boylaud et al. (2000) for the OECD and Rama and Forteza (2000) for the World Bank.

²² With the aim of studying the institutional determinants of the labour market performance, time-varying institutional indicator gathering information from different sources for the twenty OECD countries from 1960 to 1995 have been developed by Nickell and Nunziata (2001). The institutional variables used in this database include an index of employment protection (with a range between 0 and 2, increasing with the strictness of employment protection); the benefit replacement rates (average first-year unemployment benefits as a percentage of average earnings before tax); a wage bargaining coordination index (ranging from 1 and 3 with 3 being the most coordinated); and the tax wedge (the sum of the employment tax rate, the direct tax rate and the indirect tax rate).

²³ The database can be accessed freely on the web at the addresses www.ilo.org/travaildatabase/servlet/minimumwages ; www.ilo.org/travaildatabase/servlet/maternityprotection

definitions and legislative sources of measures adopted in these three policy areas in more than 100 countries around the world. No information, however, is provided by the database on the scope, content and key characteristics of such measures. Similarly, the NATLEX database²⁴, also developed by the ILO, provides a comprehensive record of abstracts of legislation and relevant information of national labour, social security and related human rights laws for over 170 countries and territories in the world.

A recording of information on labour market reforms has been developed by the OECD within the framework of the evaluation of the OECD Job Strategy. The database contains information on reforms in seven main policy areas²⁵ grouped in two sub-periods (1995-1999 and 2000-2004)²⁶. The information is summarised in country notes, but it does not provide a detailed description of the characteristics of each reform measure.

The “Social Reforms Database” developed by the Italian Rodolfo De Benedetti Foundation²⁷ provides information on reform measures adopted in some European countries. It complements the OECD indicators as it provides more insights on qualitative features of institutions and on the political opposition to reforms. The database collects information about reforms adopted in the EU15 in three broad policy areas - employment protection legislation; pension systems; unemployment/ non-employment benefits - over the period 1986-2002, while a newly created section on migration policy covers reforms adopted between 1990 and 2005. The “Social Reforms Database” contains a short institutional description of each reform and provides a broad categorization of reforms into two groups, concerning the scope of the enacted reforms - structural vs. marginal - and their expected effects, going in the direction of either increasing or decreasing labour market flexibility. This categorization places the dataset half way between a pure descriptive dataset and an indicator-based one.²⁸

2.2.3 Indicator-based databases

This group of institutional datasets does not provide information on the reform measures affecting the design of labour market institutions, but concentrates on the characteristics of labour market institutions themselves, measured by means of quantitative indicators (scoring index for qualitative variables and “aggregate” measure for quantitative variables). Two types of indicators have been devised. The first one tries to measure the reform effort through the *change* in institutions likely to be related to governmental measures (*indicators measuring reform intensity*). The second type focuses on measuring the *level* of stringency of existing

and www.ilo.org/travaildatabase/servlet/workingtime. Searches can be performed by country, region, subject and text.

²⁴ http://www.ilo.org/dyn/natlex/natlex_browse.home?p_lang=en

²⁵ These are labour taxes; employment protection legislation for both regular and temporary contracts; unemployment benefits; active labour market policies; early retirement, invalidity schemes and old-age pensions; industrial relations and wage settings; working time flexibility and part-time work.

²⁶ See OECD (2005) for the most recent version of this database.

²⁷ <http://www.frdb.org>

²⁸ Among the other databases providing general information on reform measures, it is worth mentioning the International Reform Monitor project of the Bertelsmann Foundation, reporting on social policy, labour market and industrial relations reforms adopted in fifteen OECD countries: <http://www.reformmonitor.org>

labour markets institutions. These indicators measure an “outcome”, which can be due to the past and current effect of governmental measures, but can also be due to other variables such as labour market practices coming both from employers and employees (such as developments in part-time jobs and fixed term contracts). The link with labour market reforms can be indirect and blurred by implementation delays and lagged effects.

- *indicators measuring the reform intensity*: they measure the reform effort through the *change* in institutions suppose to be related to governmental measures. A set of quantitative indicators on the reform efforts has been recently computed by the OECD from the aforementioned descriptive database developed for the evaluation of the OECD Job Strategy. A large effort has been put into coding qualitative information so as to construct quantitative indicators of reform progress in each area and also in aggregate for all seven areas together. This provides an overview of cross-country differences in reform efforts between 1994 and 2004. As such, the OECD database contains a great deal of useful information on the characteristics of labour market institutions at specific points in time. However, this inventory does not provide information on key design characteristics of reforms (e.g. targeting of reform, presence of measures to ensure enforceability, etc.) nor on their implementation.
- *indicators measuring the level of stringency of existing labour markets institutions*: these types of indicators were mainly developed by the OECD and capture important dimensions of the labour market regulation, such as the protection of regular and temporary work²⁹. While providing a reasonable proxy for the extent of government intervention in the labour market, these indicators raise a number of measurement issues: for instance, they fail to capture the degree of enforcement of specific regulations³⁰. Botero et al. (2004) develop measures of labour market regulations in 85 countries and correlate them with a number of other potential determinants of labour regulations and some labour market outcomes, to demonstrate the validity of the principal theories of the determinants of labour regulation.³¹ These measures are presented as indices of employment laws (five variables)³²; collective relation laws (three variables) and social security laws (four variables) where higher values indicate greater extent of labour regulation. The approach adopted in the Global Labour Survey (GLS) database³³, focussing on implementation rather than on the regulation itself, contrasts with the work by Botero et al. (2004), which embraces a *de jure* approach to labour provisions. The GLS database, which is the result of an internet-based survey conducted in 2004 under the auspices of the Labour and Work-life Programme (LWP)

²⁹ For a description of the OECD indicator of employment protection legislation and its limits see OECD (2004).

³⁰ See Bertola, Boeri and Cazes (1999) and IMF (2003).

³¹ *Legal theories* “hold that the patterns of regulation are shaped by each country’s legal tradition”, as opposed to the *efficiency theory* according to which “institutions adjust to serve the needs of a society most efficiently” and the *political power theory* which holds that labour market institutions “are shaped by those in power to benefit themselves at the expense of those out of power”. Source: Botero et al. (2004).

³² The sub-indices of employment laws used by Botero et al. are: alternative employment contracts, cost of increasing hours worked, cost of firing workers, dismissal procedures and an employment law index measuring protection of labour and employment as an average of previous variables.

³³ Chor D., R. Freeman (2005).

at the Harvard Labour School, seeks to measure *de facto* labour practices around the world covering aspects of labour institutions such as employment regulations, employee benefits (including pension schemes, sickness benefits and unemployment insurance), labour market (including wage-setting, enforcement of minimum wage policies, gender discrimination) and the prevalence of collective bargaining. The survey has resulted in the construction of indices of labour practices in ten broad areas for 33 countries.³⁴

3. Coverage and structure of the LABREF Database

3.1. General design of the database

3.1.1. Coverage

LABREF is a descriptive database explicitly designed to complement the existing datasets and aims at closing specific information gaps. Without providing an in-depth evaluation of labour market institutions and reforms of each Member States, the database aims at systemically collecting information on measures affecting labour market institutions. LABREF records the main *ex ante* features of measures enacted that help to identify the scope of the reform and its cost-effectiveness³⁵. The scope of the reform is defined with respect to the formal broadness of the measure (i.e. if it's part of a long-term policy package), its deepness (i.e. the measure is valid for both incumbents and new entrants) and its political support (proxied by the level of involvement of social partners in the reform process). The cost-effectiveness is identified by the presence of targeting of groups such as those at risks of unemployment or inactivity and/or by some indication of potential costs in the public budget.

Inspired by this literature³⁶, the LABREF database covers nine main broad policy fields, corresponding to as many labour market institutions and subdivided into 36 areas of policy intervention (see box below). The fields covered by the database broadly reflect the classification employed in OECD (1999), with the addition of labour mobility and migration policies. They include: 1) labour taxation, 2) unemployment and welfare-related benefits, 3) active labour market programmes (ALMPs), 4) employment protection legislation (EPL) for both permanent and temporary contracts, 5) early retirement and disability schemes, 6) pension systems, 7) wage bargaining framework, 8) working time organisation, 9) migration policies and labour mobility. These fields do not exhaust of course the entire set of policies with an impact on labour market performance, but cover the main institutional determinants of labour market outcomes.

³⁴ More limited efforts to report a scoring of labour market practices over the world are regularly conducted as part of two surveys on economic freedom and competitiveness, respectively conducted by the Fraser Institute and the World Economic Forum (World Bank "Doing Business" database). Under the section on labour regulation, the Fraser Institute's "Economic Freedom around the World" index (2005) provides an index consisting of five indicators calculated over the period 1980-2003: impact of minimum wage, flexibility in hiring and firing, level of collective bargaining, unemployment insurance; use of military conscripts.

³⁵ *Ex ante* features are those expected from the enacted legislation or regulation, as opposed to those actually seen when the reform is implemented.

³⁶ See for instance de Koning et al., (2001); van Ours (2003); Layard and Nickell (1999).

The focus of the database is - as explained above - on the provision of information on a number of specific characteristics of enacted reforms, which are likely to shed some light on their design, scope, on the effectiveness of their implementation and on their durability (e.g. presence of a broad policy package, existence of policy complementarities or of potentially conflicting policy measures over time, etc.). A set of thirteen key characteristics has been identified to this effect.

3.1.2. How the data is recorded in LABREF

The LABREF database has been developed by DG ECFIN and the LMWG. Sources used to compile the LABREF database include the already mentioned ILO database, the information on Member States' developments published by the EIRO (European Industrial Relations Observatory) of the Dublin Foundation for the Improvement of Working and Living Conditions, the OECD and IMF country reports, the National Action Plans for Employment annually set-up in the framework of the Employment Strategy³⁷, national legislation and other information publicly available on the websites of the Ministries for Employment and Social Affairs.

The measures reported in the database refer to information on enacted legislation, as well as other public acts of general scope (such as decisions of public authorities or general court decisions) likely to have an impact on labour market performance, including measures entailing changes in the implementation framework of a previously adopted reform. In addition, reported reforms also encompass collective agreements, provided that they are likely to affect a large proportion of employees or to engender a change of regime in the medium term (for instance, the innovative company agreements in Germany). Collective agreements covered by the database include cross-industry agreements, tripartite agreements (involving government, trade unions and employers' federations) and sector-level collective agreements, whenever the agreement concluded in one sector is likely to set the patterns for negotiations in other sectors. The database does not record information on discussions of possible/ planned reforms or law bills not yet formalised.

A single measure may cover several areas of policy intervention and therefore be recorded several times. What matters is not the format of the measure itself, but rather the different policy actions it involves. For example, if a measure establishes a reduction in the social security contributions for the low skilled and the modernisation of the public employment services, then these will be considered as two different reforms in the database and the measure will be recorded twice.

³⁷ Starting from October 2005, the NAP have become National Strategy Reports, encompassing in one single policy document the three strands of the renewed Lisbon Strategy (macro-economic, micro-economic and employment policies).

Overview of the LABREF database

The database covers 9 main types of reforms' areas corresponding to 36 areas of intervention grouped as follows:

- Labour taxation
 - Employers' social security contributions
 - Employees' social security contributions
 - Income tax
- Unemployment and welfare related benefits
 - Unemployment benefits
 - Net replacement rate
 - Duration of unemployment benefits
 - Coverage (number of people or sectors of the economy covered)
 - Entitlement (eligibility rules, job availability requirements)
 - Other benefits
 - In-work benefits (employment conditional benefit or tax credit)
 - Means-tested benefits (housing, social assistance)
- Active labour market programmes
 - Public Employment Services (job assistance, job-counselling etc)
 - Training
 - Direct job creation and employment subsidies
 - Other schemes
- Job protection
 - Permanent contracts
 - Procedural requirements
 - Notice and severance payments
 - Restrictions dismissal
 - Temporary contracts
 - Maximum number of renewals
 - Maximum duration
- Pension Systems
 - Early retirement
 - Disability schemes
 - Pensions
 - Level
 - Eligibility
 - Coverage
 - Tax treatment
 - Contributions
 - Other
- Wage Bargaining
 - Statutory minima
 - Contractual Flexible arrangements (e.g. performance related pay)
 - Government intervention in wage bargaining (e.g. social pacts or extension clauses)
- Working time
 - Participation friendly schemes
 - Working time organisation over the life time (e.g. working time accounts; part-time work arrangements for older workers; sabbatical leaves etc).
- Immigration and mobility
 - Immigration
 - Border controls
 - Selective Immigration policies
 - Measure to facilitate labour market integration of immigrants
 - Mobility (Housing, social security portability; degree recognition etc)

The main features of reforms recorded in LABREF are:

1. *General description of the measure:* A reform measure should be described in sufficient detail. Reforms are not limited to legislative changes only, and may also entail changes in the implementation framework. In this case, it is specified that the measure implements a previous decision.
2. *Reference (Budget law, decree, law or other).* This corresponds to the text establishing the measure.
3. *Information source concretely used to fill the database* can be, for instance, OECD, EIRO website, NAPs or other national sources.
4. *Year of adoption:* the date when a reform measure is legally enacted. The database does not provide for the recording of information on planned reforms.
5. *Timing of implementation* (i.e. entry in force, phasing-in schedule). This corresponds to the scheduled or expected timing of the implementation and not to the date of the enactment of the measure (which refers to question n°4). While changes in labour codes tend to be unique events (although spread over time), changes in contributions, taxes and benefits occur more frequently. Both measures can be taken gradually or in one stage.

Detailed features of the reform design

6. *Direct budgetary costs for general government:* As a first option here appears only information from national authorities.
7. *Socio-economic groups targeted,* i.e. young, older worker, low wage earners, low skilled, female, long term unemployed.
8. *Is the measure applied to new entrants only or also to current incumbents?* A key issue is also to know if the measure is “marginal” concerning only the inflows (the new comers or current incumbents only) or “substantial”, affecting both the “stock” and the new-comers, i.e. all persons affected by institutions/policy measures. This has an impact of the effect of the measure and it may reflect its political feasibility.
9. *Are enforcement and monitoring procedures put in place? Is an ex-post evaluation foreseen? If so, is the assessment carried out by the government or by some independent organisation?* This information might be difficult to find in many instances.
10. *In order to be implemented does the reform require policy interventions in related areas?* The existence of conflicting measures in related area or insufficient resources allocated because of budget constraints might hamper or delay a satisfactory implementation of the measure. Therefore, these problems should be tackled to allow for an actual implementation of reforms which require a joint policy intervention.
11. *Is the measure embedded in a formal long-term policy programme, and is the reform part of a reform package.* These questions are important as a characterisation of whether labour market reforms are comprehensive and designed to exploit the possible complementarities with other measures.
12. *Is there an involvement of the social partners? If so, do they have an active role or a passive (consultative) role? Do they agree on the measure?* A reform may be carried out through governmental action solely, governmental action with social partners’ consultations, tripartite agreement or social partners’ agreement. An active involvement of social partners often makes the measure more acceptable and therefore less subject to a risk of being reversed.
13. *Main impact: on L^d , L^s , w or matching of unemployed with vacancies?* This question relates to the channel through which the reform operates. It refers to the **direct** effects and should ideally focus on the short-term impact.

3.2. The policy areas covered by the LABREF database

3.2.1. Labour taxation

To cover the main determinants of labour taxes, the LABREF database collects information on reforms affecting social security contributions both for employers and employees, as well as personal income taxes. The impact of labour taxes on labour market performance remains a subject of debate³⁸. Taxes on labour put a wedge between product wage paid by firms and the consumption wage received by employees. The effect on employment depends on real wage resistance (i.e. whether or not the real net wage moves to compensate increases/declines in the labour tax). In this case the labour costs and the labour demand remain unchanged. Moreover, as long as taxes and social contributions treat different incomes (either unemployment benefits or labour income) equally taxation should not affect employment³⁹. The same holds in theory when workers consider the link between their current and future benefits and the taxes or social contributions paid by them. However, in practice these effects are less obvious as tax system differentiate different income sources, workers do not perceive the links between taxation or social contributions and benefits, and real wages do not adjust to changes in taxation.

3.2.2. Unemployment and welfare-related benefits

The LABREF database collects information on the design characteristics of reforms adopted in the field of unemployment benefits concerning both the replacement rate and duration of benefits, and the eligibility conditions set for having access to/keeping such benefits. Economic theory and empirical research⁴⁰ suggest that relatively high unemployment benefits and relatively long benefit duration, insofar as they reduce the gap between labour and non-labour income, reduce job-search incentives and the willingness of the unemployed to accept a job. In addition, more generous unemployment benefits (both levels and duration) may put upwards pressure on the reservation wage and ultimately increase the wage pressure. In both cases they worsen the employment chances of those looking for a job. On the other hand, as long as they subsidise search, they allow job-seekers more time to look for a better job, improving the matching between unemployed and vacancies. The evidence suggests that eligibility conditions and job-search requirements can be even more important than the level of benefits. Also the threat of losing benefits if a job offer is not accepted tends to raise the incentive to search.⁴¹ More in general, a system with monitoring and sanctions restores search incentives most effectively, thus allowing for higher benefits than otherwise.

³⁸ While a number of empirical studies have found that high labour taxes tend to have an adverse impact on labour market outcomes (Belot and van Ours (2001), Nickell (1997)), some are less conclusive (Scarpetta (1996), Nunziata (2003)) and others have found an interaction of labour taxes with other institutions such as the level of centralisation/ co-ordination of wage bargaining settings (Daveri and Tabellini (2000) and IMF (2003), Chapter 4).

³⁹ Pissarides, C. (1998) and Blanchard, O. (2005).

⁴⁰ Scarpetta (1996), Nickell (1998), Elmeskov *et al.* (1998), Nunziata (2003), IMF (2003).

⁴¹ See for instance Jensen, Rosholm and Svarer (2003).

Welfare-related benefits are also a policy area for which information is collected in the database. In-work benefits and means-tested benefits are regrouped under this category. In-work benefit schemes are designed to significantly raise in-work income for low-wage earners above out-of-work income levels⁴². While they are assumed to have a positive impact on incentives to work at low income levels, as soon as they are phased out with increasing income levels it may result in high marginal tax rates that generate benefit traps in the low income/productivity segment⁴³, thus negatively affecting the financial returns to work and creating an incentive to resort to the shadow economy. More in general, all means-tested benefits (e.g. housing benefits, child benefits, etc.) paid to people on low income on the basis of a test of income and irrespective of their working position can create disincentives to work⁴⁴, since people who have an increase in earnings suffer from the withdrawal of benefits as their earnings increase. Their effects on the labour market can thus be diverse, also in view of their interactions with other make-work-pay policies and out-of-work income support schemes, and need to be further studied⁴⁵.

3.2.3. Active labour market programmes

Drawing on the OECD classification of expenditures on ALMPs, the LABREF database provides information on ALPMs as concerns: 1) public employment services and administration⁴⁶; 2) labour market training, including training measures undertaken for reasons of labour market policy other than special programmes for youth and the disabled, subsidies to employers for enterprise training, training for unemployed adults and those at risk, and training for employed adults; 3) direct job creation and employment subsidies schemes, including targeted measures to promote or provide employment for unemployed persons and other groups specified as labour market policy priorities (other than youth or the disabled)⁴⁷; 4) special schemes, focusing on youth measures and measures for the disabled.

Active labour market programmes (ALMPs) - including training and retraining, job placement and assistance, direct job creation - can play a positive role by improving the efficiency of the job-matching process. These programmes can be particularly important for low productivity

⁴² A definition of in-work benefits is contained in OECD (2005), Chapter 3, according to which “in-work benefits are welfare schemes designed to provide income supplement to needy families or individuals on the condition that they work”.

⁴³ See Carone et al. (2004).

⁴⁴ For example, means-tested child benefits may contribute to high average effective tax rates distorting female participation incentives.

⁴⁵ OECD (2005), Chapter 3. On the role of interactions between in-work benefits and other means tested benefits for labour market performance see Blundell, R. and H. Honeys (2003).

⁴⁶ The following services are included: placement, counselling and vocational guidance; job-search courses and related forms of intensified counselling for persons with difficulties in finding employment; support of geographic mobility and similar costs in connection with job search and placement.

⁴⁷ These measures can take different forms: 1) Subsidies to regular employment in the private sector, in the form of wage subsidies for the recruitment of targeted workers or, in some cases, for continued employment of persons whose jobs are at risk. Grants aiming primarily to cover enterprises' capital costs are not included, nor are general employment subsidies or subsidies paid for all workers in certain regions; 2) Support of unemployed persons starting enterprises; 3) Direct job creation (public or non-profit), in the form of temporary work and, in some cases, regular jobs in the public sector or in non-profit organisations, offered to unemployed persons.

workers that have been priced out of the labour market, insofar as they improve their employability. Nevertheless, empirical evidence on their impact on unemployment is limited⁴⁸. Their effectiveness can also vary to a considerable extent, following the different types of programmes implemented, their design and implementation patterns. For instance, public job creation and wage subsidy programmes can entail deadweight losses (i.e. subsidised jobs are created that would have been created even without the subsidy) and substitution effects (firms have an incentive to replace regular work by subsidized labour), while their outcomes have sometimes shown being disappointing in terms of bringing the unemployed back into unsubsidised work⁴⁹.

3.2.4. Employment protection legislation

The relationship between employment protection legislation (EPL) and unemployment, and more in general labour market performance, is ambiguous.⁵⁰ Empirical evidence provides mixed results on the impact of EPL on labour market performance⁵¹. Researchers also suggest that in a setting where restrictive employment protection legislation for workers with permanent contracts coexists with more flexible regulation for temporary contracts, the bargaining position of the “insiders” on permanent contracts will result strengthened without much risk of job losses, while any resulting negative effects on employment will be mainly borne by the “outsiders” on fixed-term contracts. Deregulated temporary contracts will increase the turnover of this segment of the labour market without representing a window of opportunity to more stable work relationships, thus increasing their marginalisation and the risk of segmentation of the labour market⁵².

To provide background information on all these issues, the LABREF database looks at policy interventions in the area of employment protection legislation for both permanent and fixed-term contracts. These include notice and severance payments, restrictions of dismissals and other procedural requirements for permanent contracts, while the maximum duration and maximum number of renewals are recorded as far as fixed-term contracts are concerned.

3.2.5. Early retirement and disability schemes

There is a wide consensus in the economic literature that generous early retirement and badly designed disability schemes have played an important role in distorting the incentives to participate in the labour market. A wide array of early retirement and other benefit schemes, including disability pensions awarded on the basis of labour market considerations and benefits provided, for instance, in exchange for the employment of younger workers, were often offered to redundant or unemployed elderly workers in response to severe shocks in the

⁴⁸ Betcherman, G. (2000).

⁴⁹ Martin (2000).

⁵⁰ As a result of stricter EPL, dismissals will become more difficult, the bargaining power of insiders will increase and firms will be more cautious about filling vacancies. On the other hand, employment relations will become more stable and involve higher investment on firm specific human capital, hereby inducing productivity and competitiveness gains. The literature on EPL is abundant. See for example the reviews by Nickell, S. (1998, 2002), Betcherman, G. (2000), Young, D. (2003), OECD (2004) chapter 2 and Dreger, C. et al. (2005).

⁵¹ See OECD (1999).

⁵² OECD (2005), Blanchard and Landier (2002). On wage differential between fixed-term and permanent contacts see Mertens, A., V. Gash and F. McGinnity (2005) .

labour market (*lump-of-labour argument*). The LABREF database looks at reform measures touching both early retirement and disability schemes. In particular, the database collects information on reforms modifying eligibility criteria for invalidity and sickness benefits, monitoring and sanctions, and their interaction with activation measures.

3.2.6. Pension systems

Europe's population will be smaller and older in 2050. While the budgetary risks are well known, less attention has been paid on the economic impact of ageing populations. Unless offset by a rise in productivity, a decline in the size of working-age population will act as a drag on economic growth. Thus, the design of the pension systems plays an important role in determining the participation and employment rate of older workers. The LABREF database looks at policy interventions having an impact on the level of old-age pension benefits and their coverage (concerning specific groups, such as workers in given sectors, those employed with atypical contracts, etc.), as well as on the eligibility conditions (age requirements, etc.), the contributions paid to the pension system and tax treatment.

3.2.7. Wage bargaining framework

Under the heading of wage bargaining framework, the LABREF database provides information on policy actions concerning the introduction/modification of statutory and contractual minimum wages, flexible pay arrangements (e.g. role of performance-related pay, bonuses) and government interventions in the wage bargaining process (e.g. extension of collective wage agreements or modifications of the collective bargaining/ wage settings). There is no consensus among researchers on the impact of minimum wage on employment performance, also because of the few cross-country analysis performed so far⁵³. The systematic data collection provided by the database on measures (either under the form of legislative acts or collective/ tripartite agreements) fixing statutory or contractual minimum wages could therefore provide useful insights to this respect. This information, together with data collected on government interventions in the field of wage bargaining settings and on flexible pay arrangements, could also be used as an indicator of the evolution of the wage setting mechanisms proper to the different bargaining systems.

Some authors⁵⁴ suggest in fact that bargaining systems which are either highly centralised at national or cross-industry level or decentralised at the level of firms perform better in terms of employment rates than intermediate systems where bargaining takes place at sector level⁵⁵. Nevertheless, both this causal relationship between the level of centralisation of wage bargaining systems and the unemployment rate and the theoretical assumptions on the impact of minimum wage on labour market performance (that a minimum wage always costs jobs) are being put into question by more recent literature and empirical analysis⁵⁶. Consensus is in

⁵³ See Betcherman, G. (2000) and Dolado, J., F. Felgueroso and J.F. Jimeno.

⁵⁴ For an excursus of literature see European Commission, 2004.

⁵⁵ The main advantage of centralised bargaining would be that it allows the social partners to internalise the negative impact of excessive wage claims on overall employment and to provide a stronger wages' response to changing macroeconomic conditions, thus leading to economy-wide wage moderation. Decentralised bargaining, on the other hand, would mean that wages adjust better to local productivity and labour market conditions. The wage compression resulting from a highly coordinated bargaining system could yet intervene at the expenses of the young and/or low-wage workers. A similar effect might be expected for minimum wages.

⁵⁶ See for all Forni, L. (2004).

fact growing on the fact that judiciously chosen minimum wages (for instance with different rates fixed across sectors and ages) might be expected to improve labour market attachment without reducing employment, thus successfully supporting other make-work-pay policies.

3.2.8. Working time organisation (WTO)

The LABREF database provides information on enacted measures that affect work organisation from three points of view: 1) participation friendly schemes, aimed at better combining private and professional life - which are expected to conduct to higher labour market participation; 2) schemes concerning the working-time organisation over the life-time - such as multi-annual working time accounts, favourable part-time work arrangement for older worker, or sabbatical leaves for studies or personal reasons - which aim at reorganising the career-time; 3) flexible working time arrangement which allow firms to adapt working hours more easily and with lower costs, so as to improve work organisation and productivity at the firm level and ultimately to make room for more employment creation.

3.2.9. Immigration and labour mobility policies

Since the numbers of third-country nationals make a growing contribution to the total labour force and employment rates in several Member States, the database also provides information on immigration policies likely to affect the labour market outcomes as far as immigrant workers are concerned. Policy interventions covered by the database include: 1) Border controls, encompassing measures related to the entry, stay and access to the labour market, measures for users of clandestine labour force and their enforcement and regularisation programmes; 2) Selective immigration policies, including quota systems aimed at the recruitment of foreign workers, easing of recruiting policies for highly skilled or for specific occupations, bilateral labour agreements on seasonal or temporary workers; 3) Measures to facilitate the labour market integration of immigrants, ranging from ALMPs to the recognition of formal education attainments and the entitlement to benefits/ social assistance programmes specifically targeted at immigrant workers (and asylum seekers).

Labour mobility policies have been included in the database as a separate item, aiming at improving the conditions for workers to take up a job which is distant from the main centre of interest. This heading include a quite disparate set of measures ranging from those providing economic incentives for housing, to the recognition of acquired qualifications and skills or improving the portability of supplementary pension rights.

3.3. Features of the reform design

The specific characteristics on the reform measures recorded under the different policy fields contained in the database are identified by thirteen descriptive features focusing on the institutional characteristics of the reform design.

3.3.1. “Main features”

Under the heading “Main features of the reform”, factual information is collected on the general characteristics of the measures enacted. Under this heading, the database provides a general description of the provisions contained in the enacted measure, the reference to the legal text (or other act) establishing the measure, the information source concretely used to fill the database, the year of adoption and the timing of implementation (i.e. entry into force, phasing-in schedule).

3.3.2. “Detailed features”

This section of the database reports information on a broad set of features that the economic literature widely recognises as “desirable” characteristics in the design of labour market institutions.

A first issue concerns the **budgetary impact** of labour market reforms. As general rule, a policy measure which involves a large amount of public spending should be submitted to a proper cost-benefit analysis. To this respect, one has to consider whether the financial burden is excessive in the sense that the outcome of the measure in question would have been occurred anyway without policy action (deadweight costs) and whether there is a substitution of those untouched by the policy intervention with those touched by it either within the same employer (substitution effect) or with other employers (displacement effect). Despite the importance of these issues, the information available does not allow a precise quantification of the budgetary consequences of labour market reforms. The approach followed in the database simply reports if in the relevant act (e.g. the budget law) there is any reference to direct costs for the public accounts.

A second question that the literature has addressed as a key variable in labour market performance is the issue of **targeting**. The identification of target groups in the design of policy may improve both the effectiveness and the efficiency of the measure implemented. Indeed, successful reforms improved labour market performance when they modified the participation behaviour of groups with low labour market attachment (women, older workers, low skilled). This occurred when activation measures that tightened the eligibility conditions for access to the unemployment benefits were combined with targeted measures directed towards groups at risks of inactivity or unemployment⁵⁷. The database identifies whether policy initiatives are targeted and in this case the “socio-economic groups targeted” by the measure in question (e.g. young, older worker, low wage earners, low skilled, female, long term unemployed).

In order to provide a broad picture of the scope of the reform, independently from its targeting, the database records whether a single measure applies to **new entrants and current incumbents only or to both of them**. This information should help to understand if a measure is “marginal” - i.e. concerns the inflows (the new comers) or the “stock” (those already holding a certain position) only - or “substantial”, i.e. both of them. This has an impact of the effectiveness and political feasibility of a certain reform strategy.⁵⁸ For example, for the political feasibility of the reform process policy makers may introduce minor changes for certain categories only gradually over time.

Another key question concerns the need for an **ex-post evaluation** of the measures enacted. This is important to fine-tune or, depending on their observed efficiency, even abandon unsuccessful measures and reshape labour market policies in the future. Post-evaluation analysis can be usefully employed in the initial phase of reforms, to assess whether certain undesirable or disappointing outcomes reflect policy design mistakes, implementation lags or implementation failures, due for example to the lack of proper functioning labour market

⁵⁷ E.g. de Koning *et al.* (2001), van Ours (2003).

⁵⁸ Broadening the reform process by enlarging the package of measures and deepening it with respect to specific target groups may have advantages and disadvantages. For a discussion of this issues in relation to the labour market see Arpaia and Mourre (2005).

implementing institutions.⁵⁹ The LABREF database gives an answer to the following questions: “Are enforcement and monitoring procedures put in place? Is an ex-post evaluation foreseen? If so, is the assessment carried out by the government or by some independent organisation?” bearing in mind that this information might be difficult to find in many instances.

It is also interesting to know if we can reasonably expect any positive **interactions with other policies** or, on the contrary, any risk of poor implementation or objective impediment because of lack of actions in other related areas of policy intervention. In such a case, problems should be tackled to allow for the actual implementation of the reform, which requires a joint policy intervention. To this effect, the database asks the question: “In order to be implemented does the reform requires policy interventions in related areas?” It is not easy to extract this type of information from the documents used to compile the database. However, a comprehensive collection of reform measures adopted in a given country and over a reasonable number of years can facilitate the difficult task of answering this question.

The literature on the political economy of structural reform has not achieved a consensus on whether a strategy which broadens the reform package has more chances of being successful than an approach that introduces marginal reforms without being embedded in a formal packaging. The database helps to deepen these issues by collecting information on whether a specific measure is part of comprehensive policy package which tackles jointly different issues such as flexibility at the intensive and extensive margins, reforms of the benefits system and of the active labour market programmes etc. In order to characterise reforms along this dimension the database reports whether a **measure is embedded in a formal long-term policy programme**, and is part of a reform package. This information may also help to identify whether a certain policy action has been designed to exploit the complementarities with other measures.

Some observers contend that the quality of relations between social partners and between them and the policy makers may help in building the necessary trust to gain the consensus for a specific reform⁶⁰. The **involvement of the social partners** in the reform design is a relevant question for an informed judgement on the feasibility of a reform or on the risks of reversal of reforms already enacted. A reform may be carried out through governmental action solely, governmental action with social partners’ consultations, tripartite agreement (government and social partners) or social partners’ agreement. An active involvement of social partners often makes the measure more acceptable and therefore less subject to a risk of being reversed. Hence, the database consider if there is an involvement of social partners. In the affirmative case, if they have an active or a passive (consultative) role. If they agree on the measures enacted.

Finally, in assessing labour market reforms, it is convenient to consider the channel through which the reform operates, distinguishing between measures directed to increase labour demand from those which attempt to enhance the labour supply, improve the matching process between the demand and supply or potentially have a direct influence on the wages formation mechanism. On the basis of ex-ante available information, the database therefore

⁵⁹ For instance, the lack of synergy between institutions in charge of different tasks but with same targeted group can jeopardise the policy efficiency, while the adaptation of policy bodies to local conditions (decentralisation) and the participation of civil society and business (partnership), the appropriate number of well-trained and qualified staff, may be as useful as the policy definition on paper (OECD, 2003).

⁶⁰ Blanchard (2005) and Blanchard-Phillippon (2004).

tries to report the **expected direct impact** of reform measures (on labour demand, labour supply, wage formation mechanisms or on the matching of unemployed with vacancies). Of course one measure may entail a complex set of responses over time. Hence, long-term and indirect effects are not considered.

4. A preliminary illustration of potential use of the database

4.1. Cross-sectional comparisons of the characteristics of the reforms

On the basis of different sources publicly available, the database has been compiled by DG ECFIN and cross-checked by the members of the LMWG. With the information collected for 2004, this section provides an overview of reforms enacted at the Member State level.

With the structure of the *LABREF* database it is possible to analyse the distribution of the measures enacted in 2004 by areas of intervention and specific design characteristics. Each *i* measure has been considered as a single event and classified accordingly in one of the 36 different areas of policy intervention; the sum over *i* gives the total number of reforms enacted in one country.

Simple accounting of the measures enacted would be misleading as it would neglect important aspects of the reform process. The counting of reforms has been conditioned to the desirable characteristics of the reform design. This should provide simple information on the scope of the reform (i.e. whether the measure is part of a long term policy package and it is valid for both incumbents and new entrance) and its formal cost effective design (i.e. whether the measure is targeted to specific groups and the reference documents foresee some budgetary costs for the public accounts). Hence, for each characteristic *j* of the reforms design, we have counted the number of measures *i* with the characteristic *j*. Since a single measure can have more than one characteristic, the sum (over *j*) of the number of all measures with a specific characteristics *j* is larger than the total number of measures.

The formal dimension captured by the database represents only a first, although important, layer of the reform policy. Implementing decrees often follows formal documents establishing principles, which implies lags between the policy action and the final outcomes. Hence, cross-countries comparisons provide only a description *de jure* of the reform design and not a way to rank countries according to the effectiveness and efficiency of the reform.⁶¹ Moreover, the description which is provided is based on one year only and, therefore does not capture the whole configuration of labour market reforms which usually tend to clearly emerge only over time. With these cautions in mind the next section will provide a broad description of the measure enacted in 2004.⁶²

4.1.1. An overview of reforms enacted in 2004

The following general remarks can be made as regards the characteristics of reforms enacted in 2004:

⁶¹ When backdated to the mid 1990s, the information in the database will give a time perspective of the reform process making it possible to study for example its macro-economic determinants.

⁶² A more detailed description by field of intervention is provided in section 4.2.

- the majority of policy measures taken in the EU in 2004 were in the area of ALMPs, “Taxation”, “Unemployment and welfare related benefits” (Graph 1 and Graph 3). Both in the EU10 and EU15 Member States, relatively few initiatives were taken in areas such as “Employment Protection Legislation”, “Disability and Early Retirement Schemes”, “Labour Mobility”. Policy measures adopted in the field of “Working Time Organisation” mainly concerned the introduction of flexible arrangements for reconciling work and family life or the possibility to deviate from collective agreements to introduce more flexible working time arrangements⁶³. In the area of “Pensions” relatively few were the measures enacted in the EU10 Member States. Finally, in more than the EU15 countries, these focussed on interventions aiming at improving the functioning of the active labour market policies;
- for the EU as a whole, the measures enacted were broad in their scope - i.e. they were introduced for both the incumbents and the new entrants and embedded in a formal long-term policy package - more so in EU15 than EU10 countries (Graph 1 lower panels). For the EU15 and the EU10 respectively, about 40% and 50% of all interventions in the labour market were recorded as having a direct impact on the budget. This does not imply that the remaining measures did not have a budgetary effect, as official documents may not report the information required. Finally, the probability that the measures enacted are targeted is of about 50% in the EU15 and 40% in the EU10;
- as far as the expected effects are concerned, labour supply has been the main focus in a large number of countries (the Netherlands, Austria, Lithuania, Malta, Czech Republic, Hungary, Slovakia, the UK, Germany Poland, Latvia, Italy, Spain, Sweden, Slovenia, Estonia). In contrast, only few countries (in particular the Czech Republic and Greece) adopted measures with an expected impact on the labour demand; measures with an impact on matching or wages were not only rare, but also concentrated in few countries (table 1);
- the distribution across countries as regards the characteristics of the reforms enacted in 2004 is very heterogeneous (Graph 2). An indication of the diversity in the measures implemented is provided by the variability across countries in the number of measures enacted with a certain specific characteristic. In making this comparison, the variability in the number of measures with a specific characteristic has been normalised relative to the variability in the total number of reforms.⁶⁴ There is

⁶³ Measures in this field were adopted in Denmark, Germany, Spain, France, Hungary, Italy, the Netherlands, Austria, Sweden, Estonia, Hungary, Lithuania, Malta and Slovakia. Schemes that allow the organisation of the working life along the career time has been introduced in the Netherlands, while the sabbatical leave scheme experimented since 2002 in Sweden, has been extended nation-wide.

⁶⁴ In our case we consider 8 characteristics. These are : a) number of reforms embedded; b) number of reforms valid to both incumbents and new entrants; c) number of targeted reforms; d) number of reforms which foresee an impact on the public budget; e) number of reforms with an expected impact on the labour demand; f) number of reforms with an expected impact on the labour supply; g) number of reforms with an expected impact on matching; h) number of reforms with an expected impact on wages. As measures of variability we use the coefficient of variation (the standard deviation divided by the mean). This measure has been normalised by the coefficient of variation for the total number of reforms. Formally: $CV(\text{number of reforms with specific characteristic})/CV(\text{total number of reforms})$. For the number of measures applied to both incumbents and new entrants this index is of about the same order than that for the number of measures with an expected impact on the “Labour Supply” (i.e. 1). In words the variability across country of the number of measures applied to both incumbents and new entrants is similar to the variability of the total number of reforms. This contrasts with a

evidence of much more homogeneity across countries in reforms that are enacted for both the incumbents and the new entrants than in any other reform's characteristic;⁶⁵

- More than 50% of all measures enacted in 2004 were embedded in a long term policy package in Poland, Belgium, Italy, the UK, France, Ireland, the Netherlands, Slovakia and Finland. Targeted measures are common in countries such as Belgium, Czech Republic, Slovenia, Spain, Denmark, and the UK. Finally, measures with expected direct budgetary costs for the government are found in countries such as Belgium, Luxembourg, Slovenia, Malta, Finland, Lithuania, Latvia and the UK.

value of the index of 4 for the measures with an expected impact on wages; i.e. the variability is in this case four times higher than in the unconditional number of reforms. For the other characteristics the value of the index is 3.2 for measures with an expected impact on the "Labour Demand"; 2.4 for measures "Embedded in a long term policy package or that are expected to have an impact on the matching; 1.5 for the targeted measures or those that whose reference documents foresee some impact on the budget.

⁶⁵ Of course this holds under the assumption that the number of measures applied to both incumbents and new entrants is a good proxy of the broadness of the reforms enacted.

Graph 1 Distribution of reforms by reform area and by reform characteristics in the EU: 2004

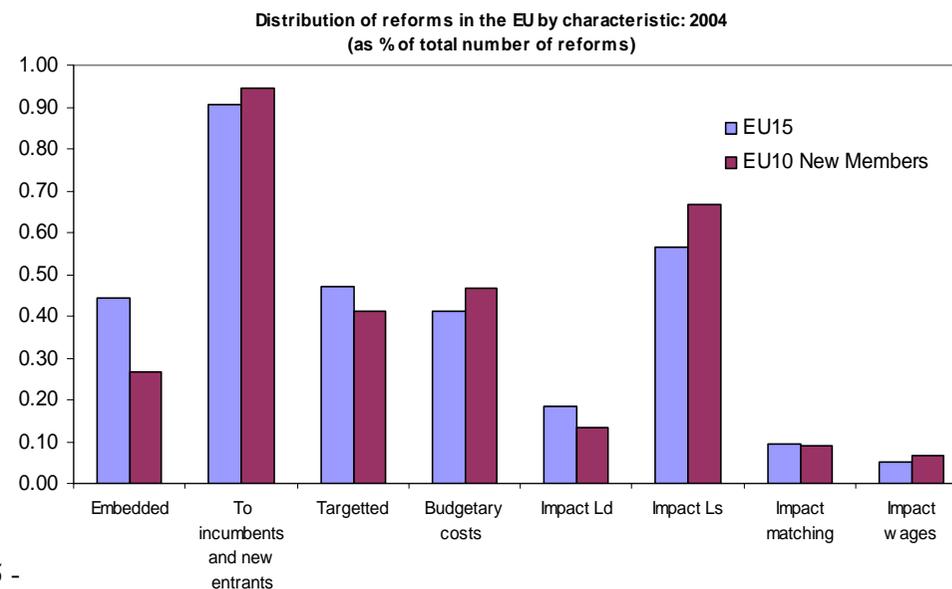
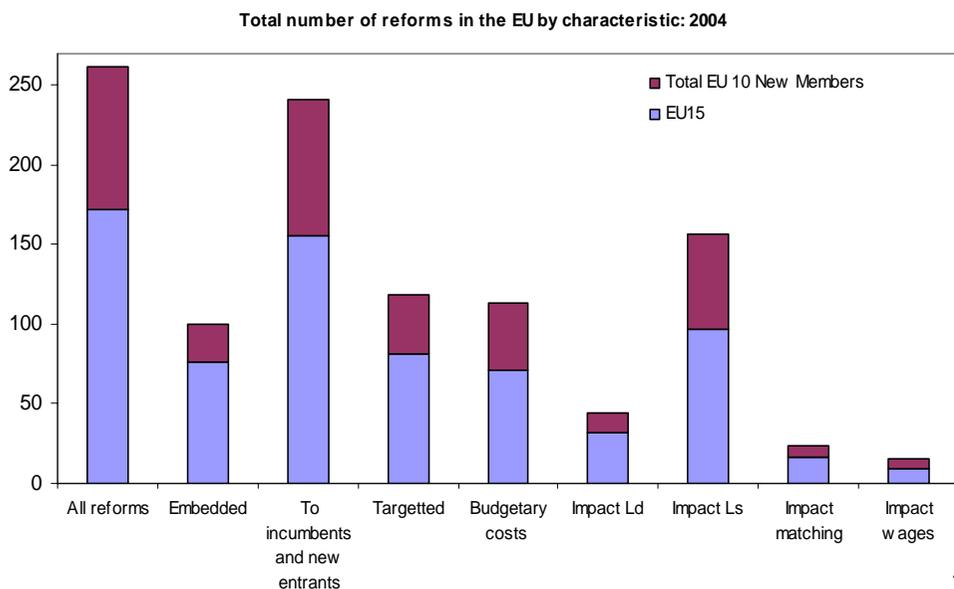
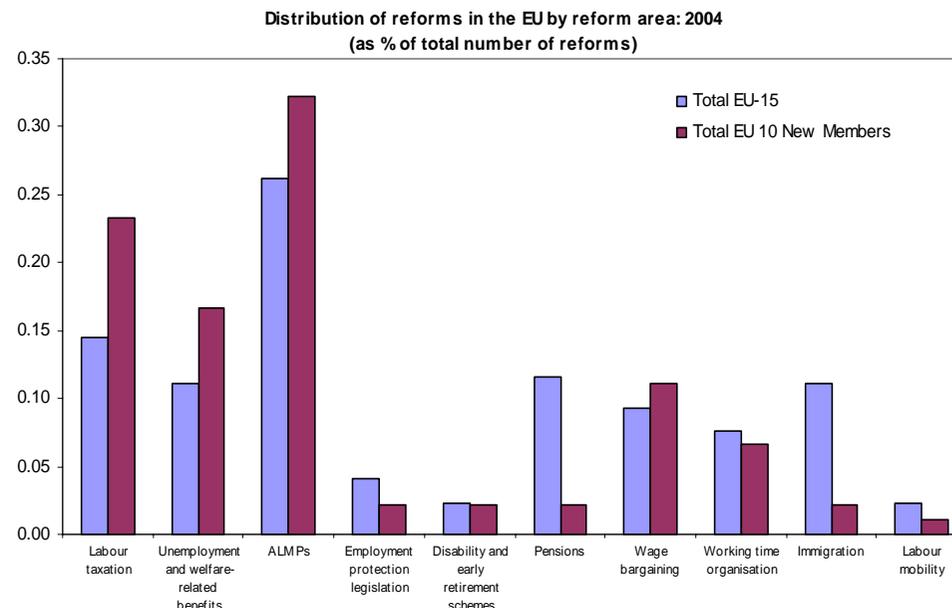
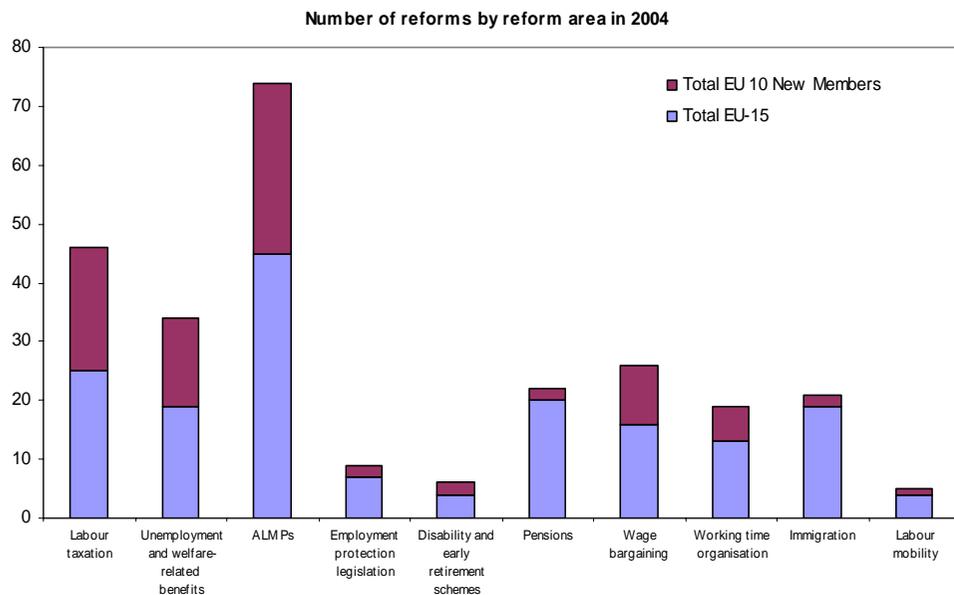
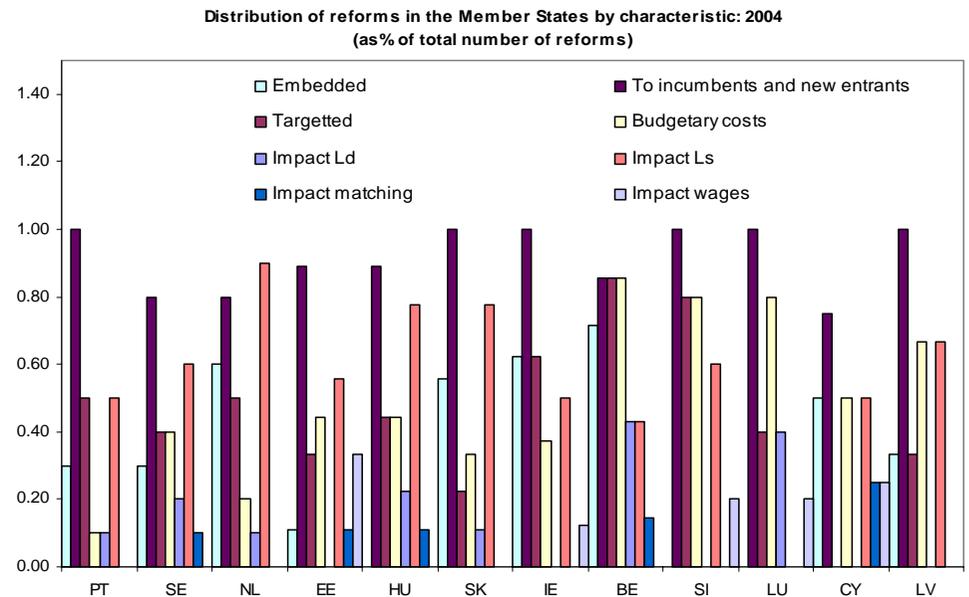
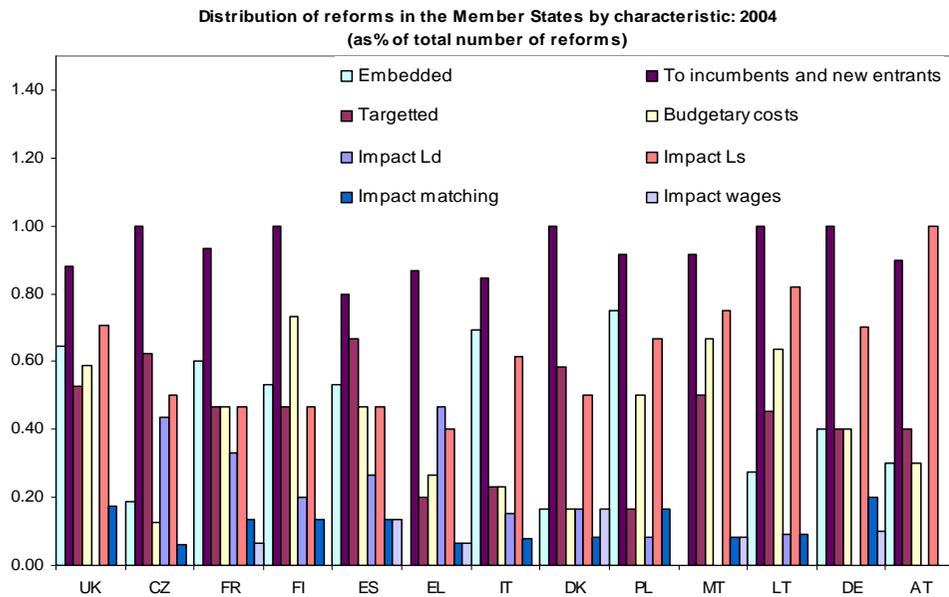
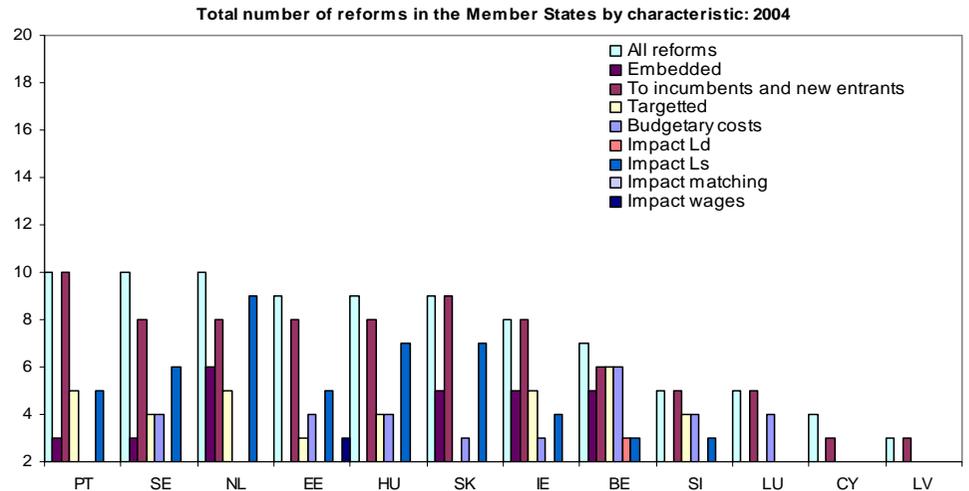
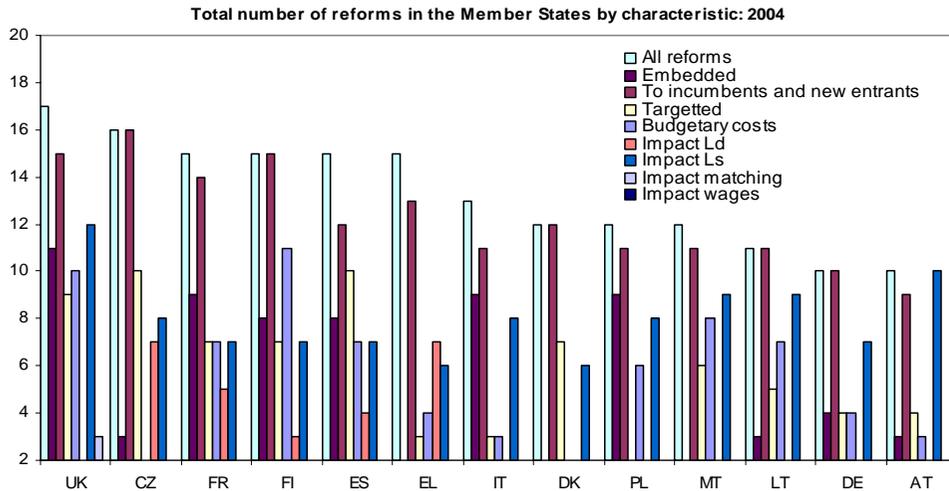


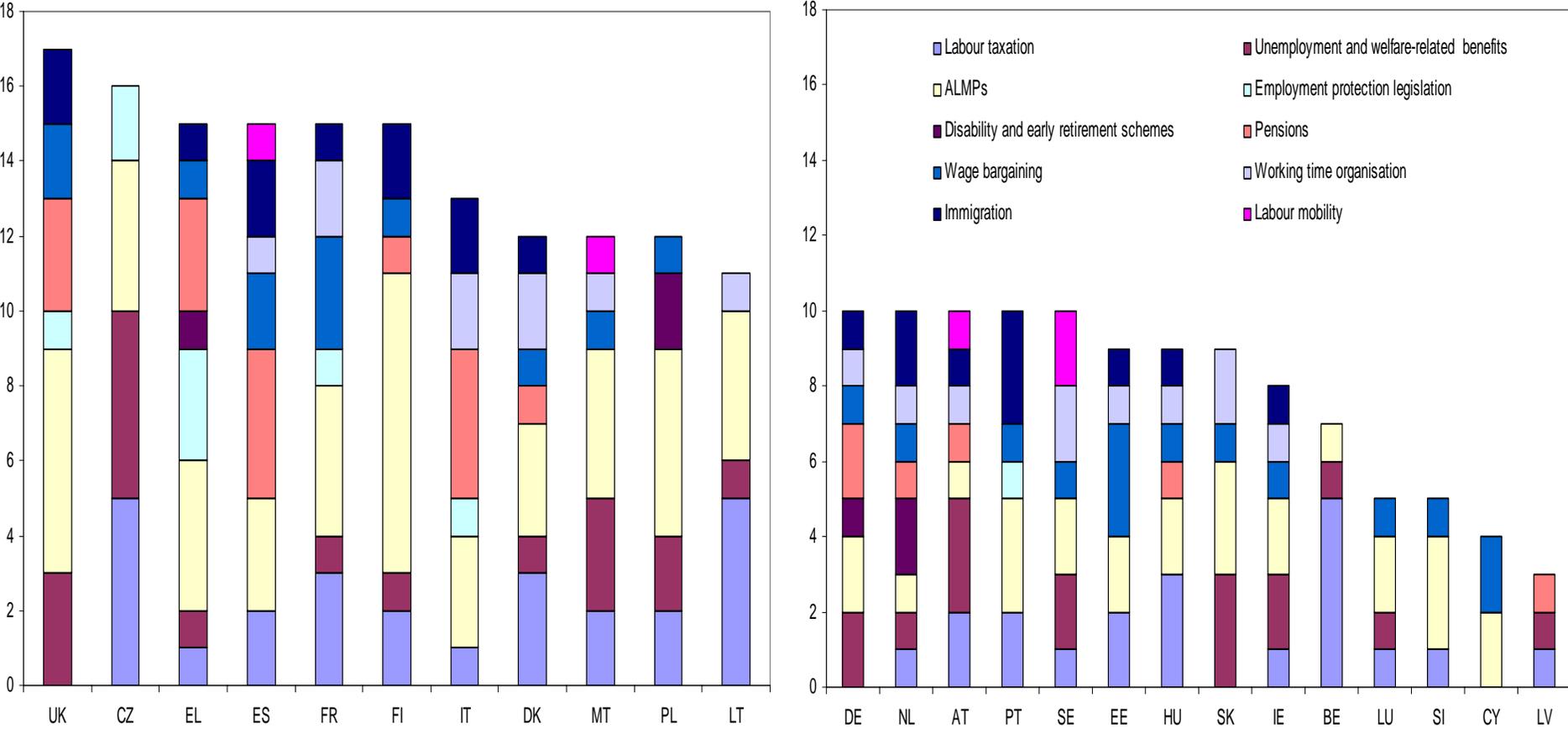
Table 1 Distribution of reforms by reform area 2004

| | Labour taxation | Unemployment and welfare-related benefits | Active Labour Market Policies (ALMPs) | Employment protection legislation (EPL) | Disability and early retirement schemes | Pensions | Wage bargaining framework | Working time organisation (WTO) | Immigration policy | Labour mobility policy | All reforms |
|----------------|-----------------|---|---------------------------------------|---|---|----------|---------------------------|---------------------------------|--------------------|------------------------|-------------|
| Belgium | 5 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 |
| Denmark | 3 | 1 | 3 | 0 | 0 | 1 | 1 | 2 | 1 | 0 | 12 |
| Germany | 0 | 2 | 2 | 0 | 1 | 2 | 1 | 1 | 1 | 0 | 10 |
| Greece | 1 | 1 | 4 | 3 | 1 | 3 | 1 | 0 | 1 | 0 | 15 |
| Spain | 2 | 0 | 3 | 0 | 0 | 4 | 2 | 1 | 2 | 1 | 15 |
| France | 3 | 1 | 4 | 1 | 0 | 0 | 3 | 2 | 1 | 0 | 15 |
| Ireland | 1 | 2 | 2 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 8 |
| Italy | 1 | 0 | 3 | 1 | 0 | 4 | 0 | 2 | 2 | 0 | 13 |
| Luxembourg | 1 | 1 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 5 |
| Netherlands | 1 | 1 | 1 | 0 | 2 | 1 | 1 | 1 | 2 | 0 | 10 |
| Austria | 2 | 3 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 10 |
| Portugal | 2 | 0 | 3 | 1 | 0 | 0 | 1 | 0 | 3 | 0 | 10 |
| Finland | 2 | 1 | 8 | 0 | 0 | 1 | 1 | 0 | 2 | 0 | 15 |
| Sweden | 1 | 2 | 2 | 0 | 0 | 0 | 1 | 2 | 0 | 2 | 10 |
| United Kingdom | 0 | 3 | 6 | 1 | 0 | 3 | 2 | 0 | 2 | 0 | 17 |
| Cyprus | 0 | 0 | 2 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 4 |
| Czech Republic | 5 | 5 | 4 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 16 |
| Estonia | 2 | 0 | 2 | 0 | 0 | 0 | 3 | 1 | 1 | 0 | 9 |
| Hungary | 3 | 0 | 2 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 9 |
| Latvia | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 3 |
| Lithuania | 5 | 1 | 4 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 11 |
| Malta | 2 | 3 | 4 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 12 |
| Poland | 2 | 2 | 5 | 0 | 2 | 0 | 1 | 0 | 0 | 0 | 12 |
| Slovakia | 0 | 3 | 3 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 9 |
| Slovenia | 1 | 0 | 3 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 5 |
| Total EU-25 | 46 | 34 | 74 | 9 | 6 | 22 | 26 | 19 | 21 | 5 | 262 |
| Total EU-15 | 25 | 19 | 45 | 7 | 4 | 20 | 16 | 13 | 19 | 4 | 172 |
| Total AC-10 | 21 | 15 | 29 | 2 | 2 | 2 | 10 | 6 | 2 | 1 | 90 |

Graph 2 Characteristics of the reform enacted in the Member States in 2004



Graph 3 Distribution of total reforms by policy area and by Member State



4.2. Detailed features: description of measures enacted in 2004

4.2.1. Labour taxation

Most measures adopted in 2004 in the field of labour taxation were aimed at reducing the tax burden on labour, so as to stimulate employment by lowering labour costs, to make work more attractive for low-income workers to and avoid 'unemployment traps'.

In Belgium, a simplification occurred of the various schemes to reduce employers' social security contributions for several focus groups. The new scheme foresees a structural rebate focused mainly on low-income workers, to be supplemented with a reduction of €400 or €1000 per quarter aimed at more specific target groups, such as low-skilled workers, older employees and long-term unemployed. In order to improve visibility of tax credits on employees' income, the government also planned to gradually introduce a 'Work Bonus' in 2005-2007, replacing the tax-credit with an increased rebate of social security contributions for low-income workers. Significant reductions in employers' social security contributions (from 20% to 100%) were also introduced

- in Hungary, Poland and Spain for businesses hiring employees among the groups with the highest difficulties to join the labour market (school leavers, unemployed over 50, women with disabilities, etc.);
- in France for employers providing personal services to individuals and for those operating in the HORECA sector concerning their low-wage employees;
- and in Spain, for case of conversion of fixed-term contracts into permanent ones.

In other countries, action in the field of labour taxation took the form of reductions of employees' income taxes, especially for low-income earners. In some countries, this was done through the reduction of the number of tax brackets at a slightly lower level on average (Austria, Hungary) and the definition of a tax-free zone for gross incomes under a given threshold (Austria, Latvia). In other countries, this translated into a significant extension of the upper bound of the tax-bracket with the lowest tax rate (Denmark) or the introduction/extension of tax credits for low-income earners (Czech Republic, Denmark, Greece, Finland, Latvia, the Netherlands, Slovenia)⁶⁶. In 2004, Sweden continued implementing its green tax shift strategy, whereby taxes on energy are increased while taxes on labour are reduced.

Specific tax incentives were introduced to boost training activities in Estonia, to facilitate teleworking in Hungary and to encourage the development of household service work in Finland and specific job creation activities in Finland, Spain and Lithuania (e.g. social enterprises). A tax exemption was introduced in Malta for women who have been absent from work for more than five years.

⁶⁶ It is estimated in the Danish NAP for Employment 2004, that the tax reductions and "employment allowance" (tax credit) introduced in Denmark will increase the labour force up to 10-12,000 full-time employees in total: the introduction of the "employment allowance" is expected to increase employment by 3,500 units in the longer term and the higher income limit for middle-bracket taxation is expected to increase the supply of labour mainly through an increase in longer average working hours.

In some countries (Czech Republic, Denmark, Italy, Portugal), measures were adopted aimed at combating undeclared work, including a tightening of the conditions for entitlement to unemployment benefits, inspection activities, more effective PES activities concerning placement and record of job-seekers, creation of specific databases.

4.2.2. Unemployment and welfare-related benefit systems

In the area of unemployment and welfare related-benefits, various measures were taken which aimed at more targeted interventions, stricter controls and tighter eligibility conditions. In the design of these measures, the complementarities and interactions with activation policies were reinforced. At the same time, access to benefits was widened to take account of the growing importance of atypical forms of employment. The sickness systems were reformed in the direction of a stronger insurance component.

A system of regular check-ups for people receiving unemployment benefits was set up in Belgium with the aim of improving participation rates and employability of the jobless through training and counselling, or ultimately through financial sanctions. Under the new system, unemployed persons who no longer actively look for a job and refuse the newly available training or counselling actions, can lose part of their unemployment benefits.

In the Slovak Republic, the replacement rate level of unemployment and other social benefits was reduced and the conditions of access to benefits tightened. Such measures were accompanied by activation policies (set in the framework of the New Employment Strategy adopted in 2003). In particular, an 'activation allowance' was introduced for unemployed people who work at least 10 hours a week, participate in community volunteer work or retraining programmes, in addition to social benefits that they may receive. In Poland, the maximum duration over which unemployment benefits can be paid out has been reduced from 12 to 6 months in all areas where the unemployment rate does not exceed 125% of the national average, while unemployed taking up a job paying less than the minimum wage were allowed to continue drawing a proportion of his/her unemployment benefit. In the Czech Republic, a slight increase in the level of unemployment benefits and the extension of the standard duration of unemployment for older workers (from 6 to 9 months for unemployed older than 50 and to 12 months for those older than 55) were accompanied by tighter eligibility criteria and stricter registration and reporting requirements with labour offices. As in Poland, unemployed who earn up to half of the minimum wage were allowed to keep their unemployment benefits.

With the aim of activating unemployed people and in particular the long-term unemployed, wide-ranging measures were adopted in Germany under the "Hartz IV" reform package. The unemployment assistance scheme and the social assistance scheme were merged into the Unemployment Benefit II Programme, involving substantial cuts in the unemployment benefits, approximately at the level of social assistance (up to €345 per month in the first 6 months of 2005 for singles or single parents in Western Germany and €331 in Eastern Germany, plus cost of "adequate" housing). Cuts in the duration of unemployment benefits were also introduced, with effect from 2006⁶⁷, and job acceptance requirements for eligibility

⁶⁷ Prior to 2006, 12 up to 32 month of full unemployment pay (60-67% of previous salary) were followed by unemployment benefits of 53-57% of the last net salary (Arbeitslosenhilfe). From 2006 on, reception of the full unemployment pay (Arbeitslosengeld I) is restricted to 12 months in general and 18 months for over-55-year-olds. This will be followed by the Arbeitslosengeld II (usually much lower) if the claimant fits the requirements (depending on savings, life insurance and household income).

to unemployment benefits tightened and enforced more strictly. In particular, recipients of the new benefits will be obliged to accept any legal job offer, regardless of the level of pay. If a recipient rejects a job, he/she will have to face sanctions in the form of a reduction of unemployment benefits for a limited period of time. Under the new rules adopted in September 2004, job seekers have also access to a standardised and integrated system of provision of welfare benefits and active assistance at local level. The long-term unemployed and young people under the age of 25 have access to special assistance in the form of training, employment or qualification measures, while, to encourage the long-term unemployed to take a first step back to work, a new category of low-paying jobs was introduced to supplement welfare benefits. These job opportunities are offered to the unemployed by their local counsellor (i.e. the local PES) against a small hourly compensation (1 to 2 € per hour), intended to top up the welfare checks they already get, without replacing the jobs offered on the labour market. If such a job offer is not accepted, they may lose or have reduced their social assistance.

The unemployment insurance coverage was extended to all categories of self-employed persons, against a reduced rate of social security contributions, in Austria and the Czech Republic. In Austria, the maximum spell of temporary employment allowing access to unemployment benefits was extended, a measure which will widen the coverage unemployment benefits for occasional workers.

With the goal of reducing the level of sickness absence, Sweden extended the responsibility of employers in co-financing sickness costs of their employees and introduced a special health-insurance fund. In the Czech Republic, the insurance aspect of the sickness insurance scheme was also enhanced while stricter rules on the entitlement to sickness benefits were introduced.

Means-tested benefits (Austria, Lithuania, Malta, UK) and in-work benefits (Ireland, Latvia, UK) were focused on the support to maternity and low-income families with children, single parents and sole earners.

A number of countries introduced new provisions for the protection of workers at risk of dismissal in case of company restructuring. Financial support and accompanying activation measures were introduced in the Czech Republic and Finland. In Belgium, measures adopted to facilitate the re-employment of workers recently laid-off as a result of company restructuring included a reduction of employers and employees' social security contributions and subsidising advice and training. In Sweden, a new "adjustment insurance" scheme was introduced providing monetary support (AGB) to blue-collar older workers faced with collective or individual redundancy in a situation of "work shortage". Moreover, under such a new scheme, all workers who have been employed by one or more companies covered by the AGB insurance for at least one year may receive also an individual "adjustment support", providing help with education/ training, job assistance, business start-up advice. In Ireland, the weekly ceiling of redundancy compensation set by collective agreement was raised, in conformity with the three-year "Sustaining Progress National Partnership" agreement of 2003.

4.2.3. Active Labour Market Policies

Major restructuring of the public employment services and boosting of activation measures took place in a large number of Member States in 2004, often in the framework of wider reform packages. The EU10 countries conducted the most comprehensive reforms.

In some countries, this involved the setting up/extension/strengthening of the activities of integrated service centres for local authorities and other service providers offering a variety of personalised activating services for difficult to employ job-seekers, young people and long-term unemployed (Denmark, Finland, Ireland).

In the UK, a new plan was announced aimed at further individualisation of the services provided by the “Jobcentres Plus”. The proposals will give local job advisors and managers greater power to tailor support to meet individual needs, and to direct resources to priority groups.

In France, the measures introduced in the framework of the "Social Cohesion Plan" provided a clearer and better coordinated range of local services for the most vulnerable, through the setting up of 300 local 'employment centres' having the mission of identifying quantitative and qualitative job needs, providing a structure for training, ensuring the monitoring of unemployed people in difficult circumstances and bringing together in a single 'public-interest partnership' all relevant parties, including the body responsible for paying out unemployment benefit. The PES monopoly over job placement was abolished and the market opened up to new private job placement operators. A special scheme for youth employment was also created, providing individual support to young unqualified unemployed, while an 'access pathway' to jobs in the local and regional government, hospital and central government civil service will enable 100,000 disadvantaged young people to be recruited in the civil service via combined study and on-the-job training programmes. Moreover, one million 'employment starter contracts' (*contrats d'activité*), consisting of 26-35 hours' employment per week split between work and training will be available over a period of four years for people who have been recipients of social security allowances or minimum income for six months, and for people receiving single parent's allowance.

The PES reform measures adopted in the EU10 represented a dramatic overhaul of the traditional employment services' operating model. Emphasis is now being put on activation measures rather than on welfare, and there are efforts to move away from dispensing unemployment benefits to becoming active providers of counselling, job-search and placement assistance services.

In the Czech Republic and Poland, key reforms adopted in 2004 opened-up the job placement services to private employment agencies and provided for the expansion of their activities which now include training, personalised career counselling, assistance to active job-seeking, better support to job-seekers with disabilities and strengthened co-operation with other entities operating on the labour market. In Poland, so-called “social contracts” were introduced to improve the cooperation between employment services and social assistance services and to ensure that the unemployed taking advantage of social assistance put the right effort in job seeking activities.

Actions planned in Estonia, Malta and Cyprus included the extension and diversification of active labour market measures to be performed by the PES, with particular attention for the long-term unemployed and people with disabilities, and the implementation of personalised guidance and training services. A programme for the development of PES was decided in Hungary. Labour exchange information systems were developed in Italy, Lithuania and Cyprus.

A great deal of attention was also paid to the development of the vocational and training activities. In Finland, specific measures were adopted aimed at boosting on-the-job training, co-financed by the labour offices and the employers and supported through activation measures. An increase in the volume of active labour market training was also foreseen in Sweden, while new activation and vocational training programmes were introduced in Cyprus, Hungary, Malta and Slovenia. A new family of Apprenticeship Programmes was adopted in the UK, complemented by a new series of accompanying measures such as developing skills passports, improving mechanisms of financial support for those for whom training provides a route back to work, extending employers' benefits in this field.

Lithuania, Malta and Estonia introduced employers' incentives to invest in continuing vocational training. In Poland, training funds self-financed by employers for the vocational training of their employees were introduced. Measures adopted in Portugal to boost training included a training obligation for employers vis-à-vis their minor employees admitted to work and the right to financial compensation for both, as well as an obligation for employers to ensure access to vocational training for fixed-term workers employed for at least six months.

A wider reform process was initiated in Germany, involving the modernisation of the vocational training system in the direction of better integration of the existing educational structures, experience and activities, so as to provide a flexible and open framework for lifelong learning, and better focus on persons with low qualifications, disadvantaged young and older people. In France, with the objective of significantly raising the number of apprentices in the medium-term, a large scale programme for the improvement, development and modernisation of apprenticeship was launched.

In the area of welfare-related benefits, a new regulatory framework for the integration of people with disabilities was put in place in Finland, Lithuania and Slovenia. This new framework provides for the definition of disability and work capacity levels and the setting up of professional rehabilitation services and of mechanisms for the provision of subsidies. It also established the conditions to set up companies (social enterprises) employing at least 30-40% of their staff among difficult to employ or disabled people. Financial support was foreseen for employers hiring people with disabilities and self-employed disabled people in Luxembourg. A modernisation and rationalisation of the system of subsidised sheltered working places for disabled people was conducted in the Netherlands and Spain. In the UK, an activation pilot scheme ('Pathways to Work'), launched on an experimental basis in October 2003 and aimed at getting claimants of incapacity benefits back to work, was confirmed and further extended.

4.2.4. Job Protection

Very few measures were adopted in the field of EPL in 2004, all at the margin of the employment protection legislation. Most targeted the flexibility of work contracts for new entrants and marginal workers, leaving unchanged the legislation on permanent employment.

Notwithstanding the wide debate conducted in Italy on the need to reform the EPL for open-ended contracts, measures enacted in 2004 were limited to setting the conditions for the implementation of the new types of flexible employment contracts introduced by the reform of the Italian labour market initiated in 2003⁶⁸.

⁶⁸ Law 30/2003, "so-called Biagi Law", and implementing Decree n. 267/2003.

In France, the so-called “Fillon Law” introduced some margins of flexibility in the procedure to be followed in case of collective dismissals. Following the new rules, firm-level agreements can now modify the procedure that must be followed in case of collective dismissal. Moreover, the threshold that triggers a collective dismissal procedure has been changed, the collective dismissal procedure shortened, the possibilities of employees' reintegration restricted when the judge deems the efforts of the firm in terms of placement or training not large enough. The placement and training requirements for large and small firms have also been modified.

Measures adopted in the Czech Republic, Greece and Poland concerned the duration and maximum number of renewals of fixed term contracts, in compliance with EU directives. In Portugal, measures adopted in 2004 aimed at making the regime of home-work more flexible and reinforcing the protection of working students and young people at work.

4.2.5. Pension systems

Most measures adopted in 2004 in the field of pensions and early retirement schemes were embedded in long-term reform packages. This was the case for Austria, Finland, Germany, Italy, Poland, Spain and the UK. Enacted measures generally involved the establishment of a stronger link between contributions and pension benefits, and therefore the possibility for workers to retire later, which should entail positive effects on the participation rate of older workers.

In Austria, 2004 saw the adoption of measures completing the reform launched in 2003, including the introduction of a defined-contribution individual 'pension account' for each working person, the introduction of a single maximum limit on earnings liable to social insurance contributions for economically active people instead of the previous differing limits for various categories of people, and the reassessment of the levels of pension insurance contribution for all occupational groups.

The pension reform adopted in 2003 in Finland was extended to the public sector in 2004: earnings over the entire employment history will affect the amount of pension; pension accrual will begin from the age of 18 and the accrual rate will rise with advancing age, up to 4.5% from the age of 63 up to 68; the general retirement age will become flexible. In Germany, the minimum entry age for early retirement on account of unemployment was raised from 60 to 63 years and the level of pension contributions was progressively raised.

The measures adopted in 2004 in Italy need to be seen in the context of reform of the pension system undertaken in the 1990s, which involved the development of second pillar pension funds and the generalised introduction by 2008 of a pre-funded notional defined-contribution scheme in place of the current PAYG defined-benefit pension system. Such measures foresaw the progressive increase of retirement age, the possibility of accumulating pension benefits and earned income, an increased support in favour of the development of supplementary pension schemes, and the reduction of the limits to the cumulus of contributory periods to different pension schemes.

Like in Italy, Hungary and Lithuania also introduced the possibility for people to continue working after their retirement age and to supply their state/occupational pension with new pension contributions completed after entitlement. Minimum retirement age was increased in

the Czech Republic and in the UK. In the latter country, the possibility was introduced to continue working part-time for the same employer while drawing an occupational pension.

The amount of pre-retirement benefits was lowered in Poland, more rigid requirements introduced for being entitled to benefits and the access age increased for both men and women. In the Netherlands, existing tax incentives for early retirement were phased out.

The restrictions to the access to welfare benefits that were imposed by the Dutch government followed the same activation approach, insofar as the tightening of the entitlement conditions to access the disability benefits were associated to a progressive increase in the tax credit, in line with the government plan to reduce the inactivity trap⁶⁹.

A rationalisation of the pension system occurred in Greece: pension coverage was extended to all categories of workers, including self-employed and workers in the agricultural sector.

4.2.6. *Wage bargaining*

In 2004, minimum wage settings were at the centre of policy action both in the EU15 and especially in the EU10. As part of the debate in EU10 countries, it was on the one hand recognised that minimum wage can have positive effects on the labour market, insofar as it makes work more attractive for those groups less attached to the labour market provided that it is accompanied by other making-work-pay policies (e.g. rebates of employers' social security contributions on permanent contracts, tax credits for maternity leave, means tested tax credit etc). On the other hand, the appropriate level of minimum wage is in most countries related to social security legislation. Therefore, every increase in the minimum wage implies adjustments in areas such as the parameters for calculating social security contributions or the income threshold whereby people are assessed as being in material need. In some of the EU10 Member States, the objective set by the government was to ensure that the minimum wage was raised more rapidly than the national average wage in the medium-term (e.g. in Lithuania and Estonia, where the objective was fixed of reaching 41% of the national average wage by 2008). In other countries, it was feared that the already relatively high level of minimum wage (e.g. 41% of average wage in Slovakia) could negatively affect employment levels in geographical areas where unemployment rates are high and the living costs/productivity levels much lower than in the rest of the country. Some other countries used minimum wage to guarantee minimum level of pay for workers not covered by an effective wage bargaining (e.g. Spain, Cyprus).

Central incomes policy agreements for the private sector were reached in Finland, Greece and Denmark. In Finland, the agreement provided for wage increases of 2.5% in 2005 and 2.1% in

⁶⁹ The Reform of the Dutch Occupational Disability Insurance Act (WAO) involved a 5% increase as of 2006 of benefits for fully occupational disabled claimants, provided that the number of new WAO entrants falls to 25,000 or below, coupled with a strong emphasis on the resumption of work with provision of supplementary wages and a re-examination on the basis of stricter criteria of all occupational disabled people under age of 50. People who lose their benefits and cannot find immediate employment will be offered the possibility to undertake a work reintegration scheme. Following the Repealing of the Self-Employed Persons Disablement Benefits Act (WAZ), as of 1st August 2004 self-employed persons are referred to private forms of insurance or to their own reserves to cover the risk of occupational disability, maternity and leave for adoption or child care.

2006⁷⁰. The pay increase will be higher for low-wage earners, while in 2006 an ‘equality increment’ of 0.3% will further improve the situation of low-wages and female dominated sectors. In the case of Denmark, lower increase rates were agreed for apprentices and trainees. In Ireland, an agreement was reached in the framework of the most recent national pact on Sustaining Progress, to review the level of national minimum wage. The agreement was aimed at giving certainty to the evolution of pay in the medium term and to sustain low-income earners. To this end, it was coupled with an increase in the employee tax credit, which tended to remove all those on minimum wage from the tax net.

The increase of national minimum wage was fixed by law in France (between 2.1 and 5.58%, depending on existing different SMIC rates), Luxembourg (2% increase), Spain (4.5% increase, up to €513 per month in 2005) and the UK (up to £4.85 per hour). In this country, a lower ‘development rate’ was fixed for workers aged 18-21 and a minimum wage at £3 per hour was introduced for the first time for young workers aged 16 and 17.

In Hungary, two tripartite agreements set the level of minimum wage (€240 per month) and the gross average increase (6%) recommended for 2005 at lower bargaining level both for the private and the public sector. The minimum wage in the private sector was also raised by tripartite agreement in Slovenia (up to €513 per month from August 2005). In Cyprus, the government intervened to fix an increase in the statutory minimum wage for occupations characterized by low trade union coverage. A raise in the level of minimum wage in the private sector intervened also in Lithuania, in the framework of the government programme to promote an increasing minimum wage. Equally, the minimum wage was raised by 6.9% in the Slovak Republic and by 8% in Estonia for 2005.

The 3% increase (up to €185 per month) agreed in Poland was accompanied by reduced rates for new employees (80% of minimum in the first year and 90% in the second) and by the proposal of the government to introduce an “activation exemption”, consisting in an increase of the tax-deductible expenses associated with the income of the lowest-paid workers, while reducing deductible expenses for those earning more than the average remuneration, so as to enable an increase of the minimum wage in net terms without increasing the attendant burdens for employers.

5. Characterising Labour Market Reforms: an explorative analysis

This section tries to identify common features in the measures enacted in 2004 across countries. The correlation between number of measures with two different characteristics provides a synthetic description of the main features of the reform process. Table 2.1 displays the correlation based on the percentage (out of total reforms), while table 2.2 displays the correlation based on their ranks.⁷¹ A positive correlation between, say, “*Incumbents & new entrants*” and “*Targeted*” indicates that countries where a large number of measures apply to both incumbents and new entrants have also a high numbers of measures that are “*Targeted*” to specific groups. Similarly, a negative correlation between measures applied to “*Incumbents*

⁷⁰ As part of the incomes policy agreement, the Finnish government decided to implement tax cuts worth €1.7 billion in 2005-2007. €1.3 billion of these will be in the form of income tax reductions.

⁷¹ Simply, after having calculated the proportion out of total reforms of those with certain characteristics, the correlation between this ratio is calculated. The graph plots these correlations.

& new entrants” and measures that are “*Embedded in a long-term policy package*” implies that countries making a high number of reforms with the former feature also have a low number of reforms that are part of a formal package.

From these correlations it is possible to identify the following patterns:

- countries where measures are often part of long-term policy packages also have a relative low number of policy interventions that apply to both incumbents and new entrants. Moreover, the correlation with the number of measures expected to have an impact on matching or on labour supply is negative, while that with measures with an (expected) effect on the labour demand is positive;
- The correlation between the proportion of reforms that are part of a long-term policy package and those expected to have an impact on matching or on wages is respectively positive and negative. These correlations reflect the large focus of reform programmes on measures that improve the matching between unemployed and vacancies. In contrast, measures expected to have an impact on wages are most of the time geared to modify the contractual or statutory (minima) wages and, as such, are one-off measures;
- there is a positive and significant correlation between the number of reforms that are valid to both incumbents and the new entrants and the focus of policies on targeting. Countries that have enacted reforms that apply to both incumbents and the new entrants have not ignored the need to focus on target groups. On the other hand, less prominence has been given to measures with an expected impact on the matching between labour demand and labour supply;
- a large number of countries have taken initiatives in the area of taxation, often with the aim of reducing the tax burden at the lower end of the income distribution. This explains the positive correlation between targeting and measures that are expected to have an impact on the labour demand. Hence, when labour demand has been the focus of policy action, targeting also represents a significant percentage of total measures;
- in countries where a large number of policy measures make some reference to an impact for the public budget, there is a relatively high number of reforms which focus either on improving the matching between labour demand and labour supply or in affecting the wage formation mechanism.

One way to describe the reform process is to compare the number of policy actions enacted with the level of distortions due to government interventions (captured for example by tightness of the index of EPL). Graph 4 reports on the vertical axis the total number of measures enacted in 2004 and on the horizontal axis the EPL1 OECD indicator (graph 4.1) or the OECD index of difficulty of dismissal of permanent contracts.⁷² Member States can be divided in 4 groups. A first group of countries is characterised by both a number of measures enacted higher than the average and an index of tightness higher than the un-weighted average; Greece, France and Spain belong to this group. These countries are joined by Italy

⁷² To ease the comparison the data have been normalised transforming the original variable such to have same mean and same variance. The chart does not report the EU countries non-member of the OECD due to lack of information on the EPL for these countries.

and the Czech Republic when the measure of strictness of labour regulation refers only to the difficulty of dismissal of permanent contracts.⁷³ Countries located in the South-East quadrant have labour market legislation that is tighter than the average and a below average intensity of measures (Austria, Portugal and Sweden belong to this group). The South-West quadrant reports countries with a below average intensity of reform measures and labour market legislation less strict than the average. Hungary, Ireland and Belgium, but only if the index of dismissal of regular contracts is considered, are in this group. Finally, countries that in 2004 made a number of measures higher than the average despite an already loose labour market regulation appear in the North-West quadrant.

⁷³ For the year 2003, both countries ranked among the first six with the lowest (less regulated) index. In these countries the measures introduced have eased the regulation for the temporary workers without changing much the tightness for the regular contracts.

Table 2.1

| Correlation between percentage of reforms according to specific characteristics | | | | | | | |
|--|-----------------------------|---------------|--------------------------|-----------------------|-----------------------|-----------------------------|--------------------------|
| | Incumbents and new entrants | Targeted | With an impact on budget | Expected impact on LD | Expected impact on LS | Expected impact on matching | Expected impact on wages |
| Embedded in a long-term policy package | -0.3*** | -0.1 | 0.0 | -0.1 | 0.1* | 0.3*** | -0.4*** |
| Incumbents & new entrants | | 0.2*** | 0.1 | -0.1 | -0.1 | -0.4*** | -0.1 |
| Targeted | | | 0.2 | 0.2** | -0.1 | -0.2** | -0.1 |
| With an impact on budget | | | | 0.0 | -0.2*** | 0.2** | 0.2* |

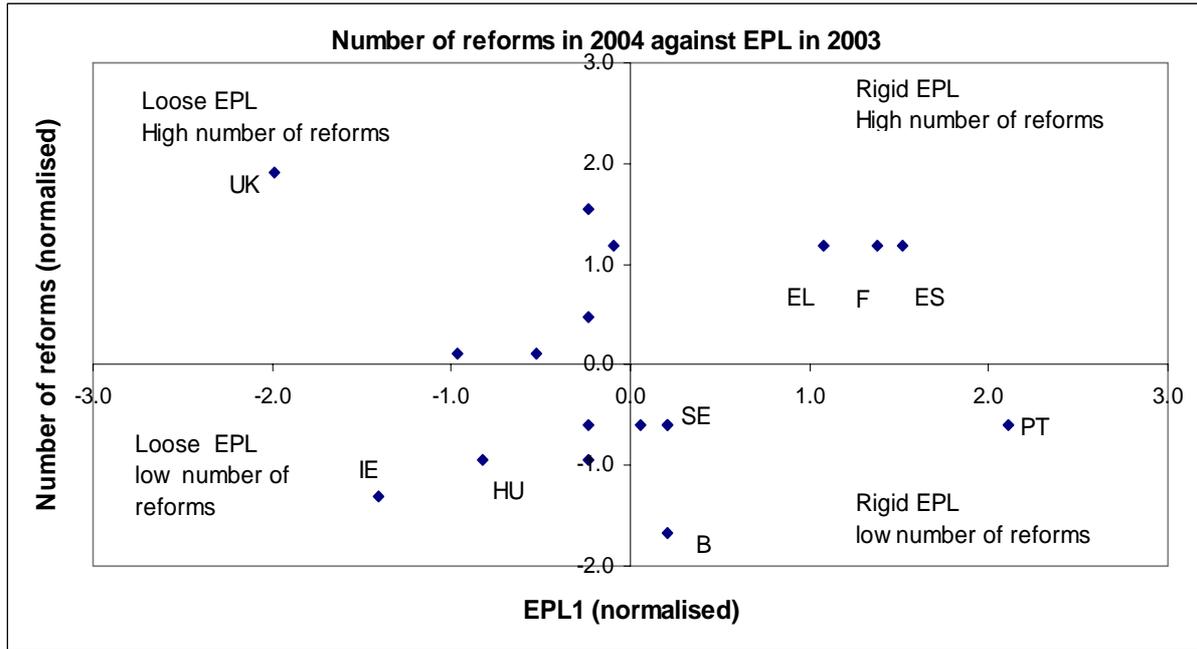
In bold correlation statistically significant at 5%

Table 2.2

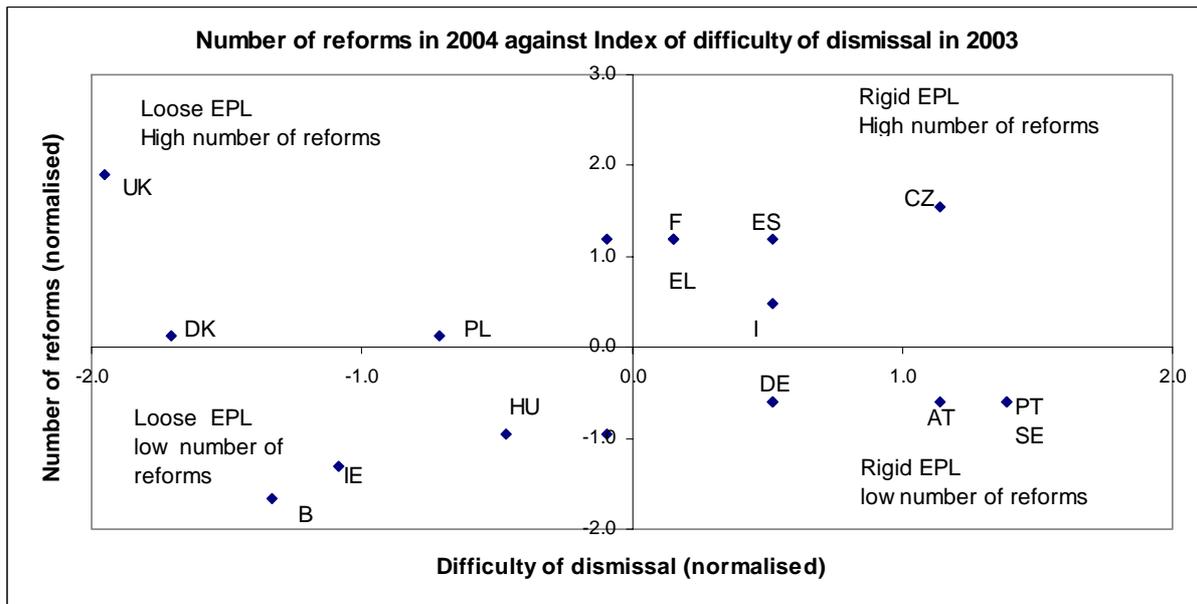
| Rank Correlation between percentage of reforms according to specific characteristics | | | | | | | |
|---|-----------------------------|---------------|--------------------------|-----------------------|-----------------------|-----------------------------|--------------------------|
| | Incumbents and new entrants | Targeted | With an impact on budget | Expected impact on LD | Expected impact on LS | Expected impact on matching | Expected impact on wages |
| Embedded in a long-term policy package | -0.3*** | 0.0 | 0.0 | -0.1 | 0.0 | 0.4*** | -0.4*** |
| Incumbents & new entrants | | 0.2*** | 0.0 | -0.1 | 0.0 | -0.4*** | 0.0 |
| Targeted | | | 0.1 | 0.2* | -0.2* | -0.1 | 0.0 |
| With an impact on budget | | | | -0.1 | -0.2** | 0.4*** | 0.2** |

*** statistically significant at 1% ; ** statistically significant at 5%, * statistically significant at 10%

Graph 4.1



Graph 4.2



Bivariate correlations only provide partial indication of the whole configuration of labour market reforms. Firstly, the information obtained is relative only to the two variables considered and, consequently, does not capture possible multiple correlations. Secondly, the correlation between the two variables might be indirect as the two variables might be linked to each other through a third variable.

To get representative typology of reforms measures enacted in 2004, this section makes use of the method of the *Principal Components Analysis* (PCA). The PCA offers a way for reducing the dimensionality of a dataset without much loss of information. The whole set of indicators is synthesised into a reduced number of components able to describe a significant proportion of the original variability. It also helps to identify patterns in the data highlighting similarities and differences. In our case, the method provides an illustration of the principal characteristics of the policy measures enacted.^{74 75} Those principal characteristics are captured by principal components or factors, which are linear combinations of the initial variables, uncorrelated (*orthogonal*) to each other.

Table 3 reports the result of the principal components analysis on the dataset composed by the proportion of reforms with one of the eight characteristics and by the index of strictness of dismissal of permanent contract. This index refers to 2003 and has been chosen to represent the status of regulation in a given country at the moment when the measures were enacted (2004). It is meant capturing the broad context within which policy initiatives are taken.

The principal components are labelled PC1, PC2, ..., PC9. The upper panel shows the eigenvalues from the orthogonalisation of the sample correlation matrix, i.e. how much of the total variance in our dataset is explained by each principal component. The lower panel shows the eigenvectors (also called the factor loadings) used as weights to calculate the principal components as linear combinations of the original series. We pick up the components on the basis of their ability to explain significant variation in the data. On the ground of the criteria suggested in the literature we decided to select the first three principal components,

⁷⁴ More formally, the PCA is a linear transformation that chooses a new coordinate system for the data set such that the greatest variance by any projection of the data set comes to lie on the first axis (then called the first principal component), the second greatest variance on the second axis, and so on. Because each consecutive component is defined to maximize the variability that is not captured by the preceding component, consecutive factors are independent of each other. The PCA is based on the following steps; 1) standardised the data to have zero mean and standard deviation equals to 1; 2) find the eigenvalues of the correlation matrix; 3) order them from the highest to the lowest, which gives the components by order of significance; 4) find the eigenvector corresponding to each eigenvalues subject to the condition that the norm equals 1. The principal components are obtained as linear combination of the original data. $\mathbf{PC}=\mathbf{\Gamma}\mathbf{x}'$ where $\mathbf{\Gamma}$ is the matrix with row the eigenvectors and \mathbf{x} the vector of the original series.

⁷⁵ Hence the PCA simplifies the problem of analysing jointly the information from different indicators while retaining those characteristics of the dataset that contribute most to its variance by eliminating the later principal components by a more or less heuristic decision. These characteristics may be the "most important", but this is not necessarily the case. As we extract consecutive factors, they account for less and less variability. The decision of when to stop extracting factors basically depends on when there is only very little "random" variability left. Two criteria have been suggested in the literature. A first method is based on the plot of the eigenvalues in a simple line plot. The place where the smooth decrease of eigenvalues appears to level off to the right of the plot corresponds to the last eigenvalue to consider. The second criteria retain only factors with eigenvalues greater than 1. In essence this is like saying that, unless a factor extracts at least as much as the equivalent of one original variable, we drop it.

explaining 73% of the total variability. The principal components reveal clusters of policies packages.

- PC1 is characterised by a positive sign of the strictness of regulation for regular contracts and negative signs of all the other variables. This component captures about 40% of the total variance. PC1 has a positive factor. This suggests that more flexible countries (i.e. with a low value of the index of strictness of regulation of EPL)⁷⁶ carry out a relative higher number of reforms. We refer to PC1 as the *flexibility effect*, which is capture the fact that more flexible labour markets have a better chances to be reformed.
- The second component explains around 20% of the total variability and about 60% together with the first component. PC2 has a relative positive factor for *Budget*, *Embedd*, and negative for the rest of the indicators. This components captures a dimension of the reforms process which contrasts the broadness of the reform in more rigid countries (i.e. the measures enacted are part of a formal long-term policy package with a focus on the labour supply) against its deepness (i.e. more attention to target groups, measures applied to all the relevant population, focus on labour demand).
- PC3 is more difficult to interpret. This component accounts for 15% of total variability. It is characterised by a strong negative factor for the index of strictness of regular contracts and a positive factor for the proportion of measures with an expected impact on wages. This factor characterises the labour market reform along the flexibility-wage dimension. It suggests that less rigid countries do not need to take measures affecting the wage formation mechanism.⁷⁷

The APC reveals a particular structure of reform policies undertaken by the Member States. Firstly, less regulated labour markets tend to have more synchronised, in the sense that a high proportion of the policy measures enacted have all the desirable characteristics identified by the database. Secondly, reforms that are enacted for large groups of targeted population (i.e. not only to the new entrants) are not necessarily devised as part of a formal long-term policy package. Finally, there is some evidence that more flexible labour markets do reforms which have a direct impact on the labour demand and labour supply. This is consistent with the view that the functioning of the labour market is in this case less represented by models of imperfect competition such as bargaining models.

⁷⁶ Remember that data are standardised, hence a negative value for the strictness variable corresponds to an index of strictness of the regulation of regular contract lower than the average (i.e. a looser regulation).

⁷⁷ Similarly, more flexible countries more frequently adopt reforms that may have a direct impact on labour market performance through either labour demand or labour supply. To be effective, these measures should be valid also for incumbents and new entrants.

Table 3 Principal components analysis

Correlation of BUDGET EMBEDD INCUMNEWENT TARGETED DISMISS LD LS MATCHING WAGES

| | PC 1 | PC 2 | PC 3 | PC 4 | PC 5 | PC 6 | PC 7 | PC 8 | PC 9 |
|------------------|------|------|------|------|------|------|------|------|------|
| Eigenvalue | 3.39 | 1.82 | 1.36 | 0.75 | 0.53 | 0.51 | 0.33 | 0.16 | 0.15 |
| Variance Prop. | 0.38 | 0.20 | 0.15 | 0.08 | 0.06 | 0.06 | 0.04 | 0.02 | 0.02 |
| Cumulative Prop. | 0.38 | 0.58 | 0.73 | 0.81 | 0.87 | 0.93 | 0.97 | 0.98 | 1 |

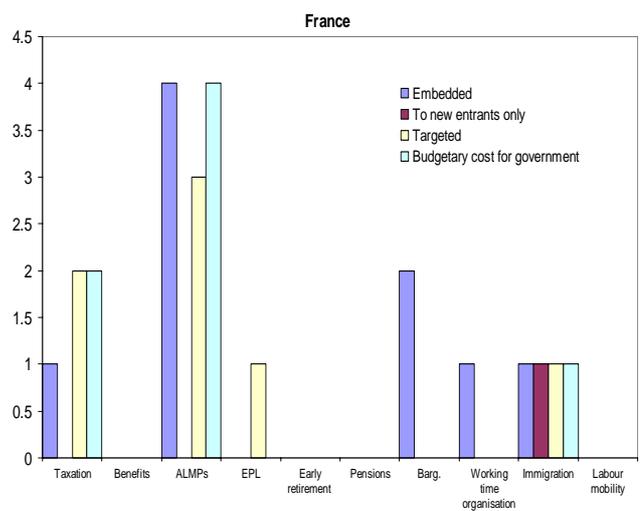
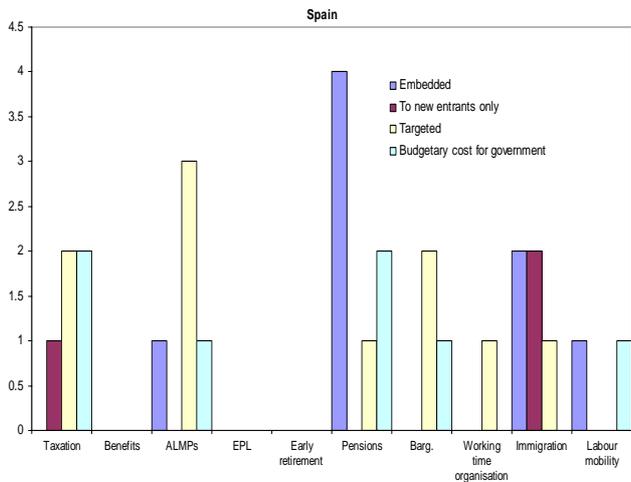
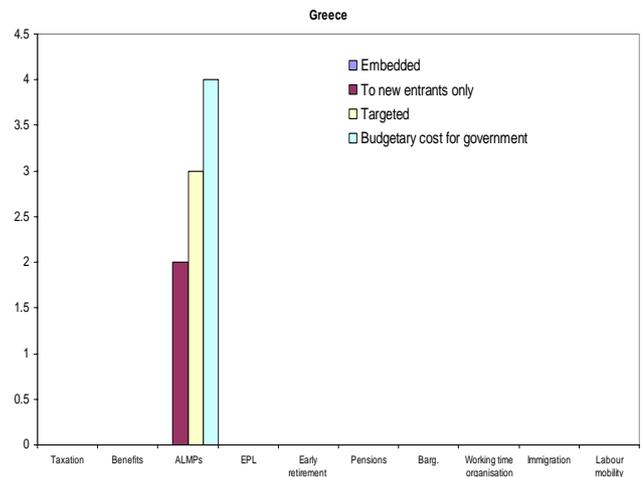
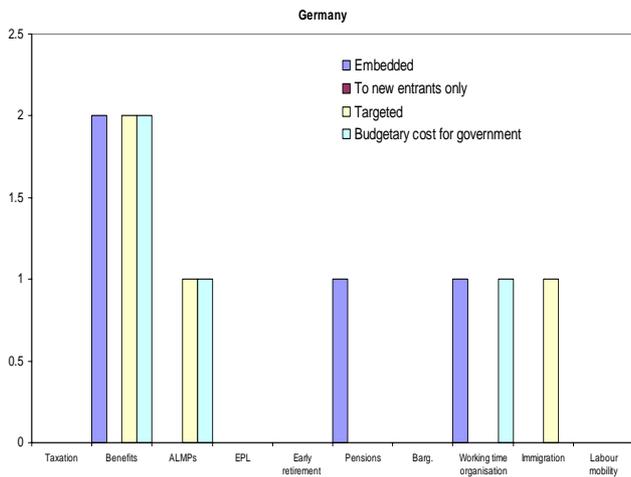
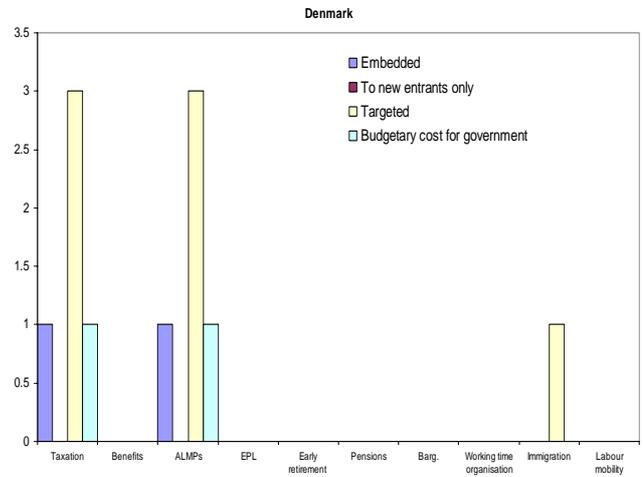
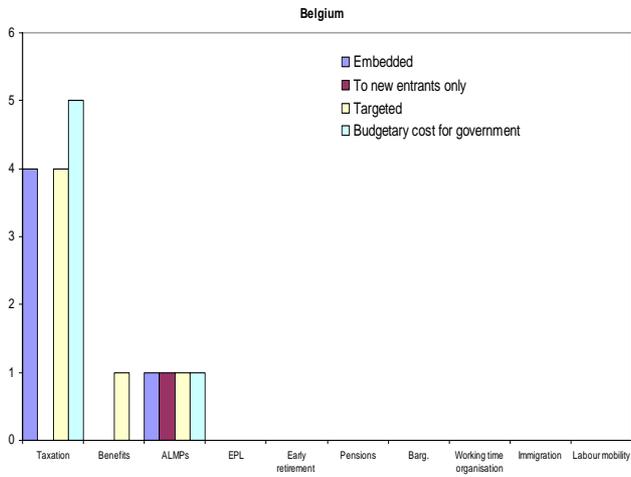
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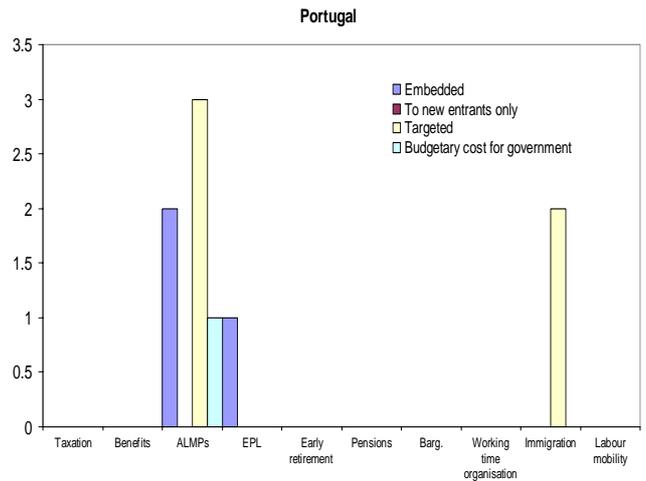
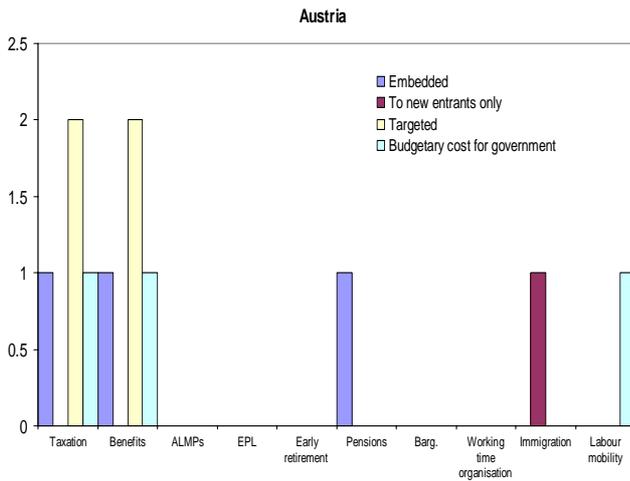
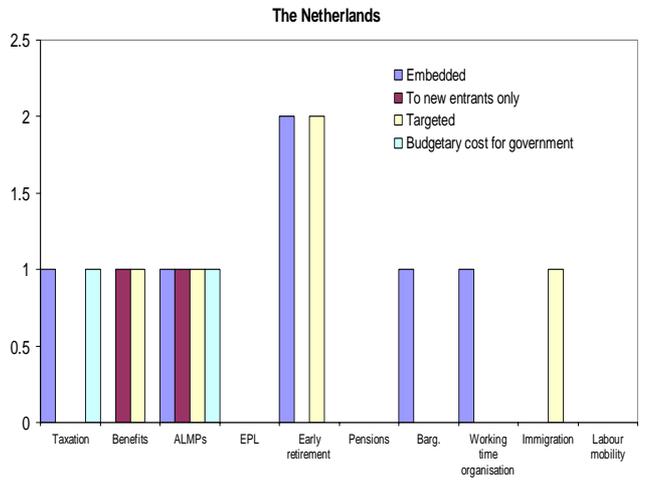
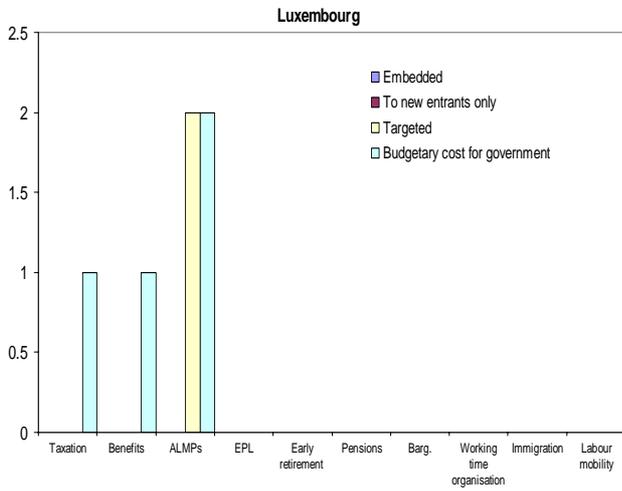
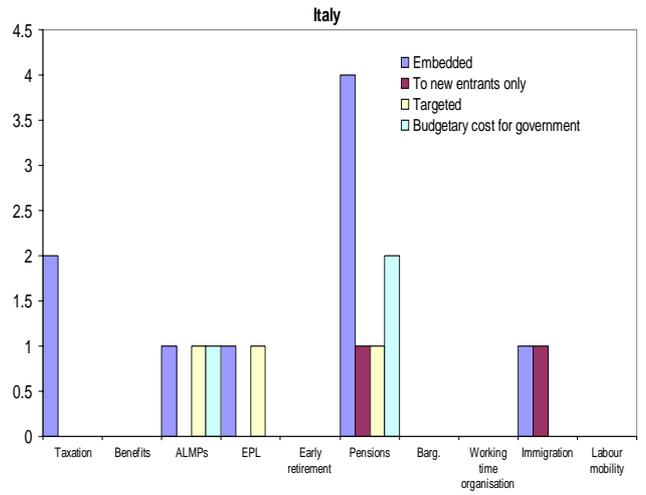
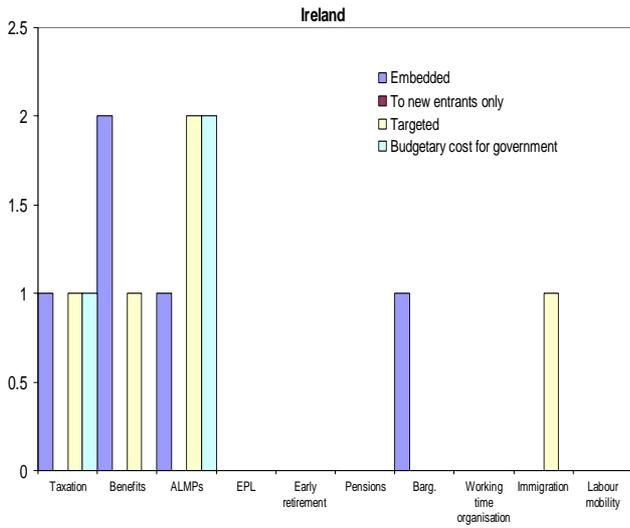
| Variable | Vector 1 | Vector 2 | Vector 3 | Vector 4 | Vector 5 | Vector 6 | Vector 7 | Vector 8 | Vector 9 |
|--|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Budget | -0.45 | 0.17 | 0.12 | -0.43 | -0.08 | 0.03 | 0.35 | 0.15 | -0.65 |
| Embedded | -0.37 | 0.35 | -0.003 | -0.02 | -0.55 | -0.02 | -0.63 | -0.18 | 0.05 |
| Incumbents and new entrants | -0.42 | -0.26 | -0.31 | 0.11 | 0.26 | 0.11 | -0.32 | 0.69 | 0.04 |
| Targeted | -0.35 | -0.31 | 0.005 | 0.29 | -0.24 | -0.74 | 0.27 | -0.04 | 0.095 |
| Strictness of dismissal for regular contract | 0.20 | -0.18 | -0.63 | -0.03 | -0.61 | 0.26 | 0.28 | 0.096 | -0.02 |
| Labour demand | -0.13 | -0.60 | -0.22 | -0.41 | 0.19 | 0.004 | -0.27 | -0.53 | -0.13 |
| Labour Supply | -0.25 | 0.32 | -0.47 | 0.52 | 0.33 | 0.12 | 0.12 | -0.40 | -0.23 |
| Matching | -0.48 | 0.03 | 0.09 | -0.18 | 0.02 | 0.36 | 0.37 | -0.15 | 0.66 |
| Wages | -0.10 | -0.43 | 0.46 | 0.50 | -0.23 | 0.47 | -0.001 | -0.08 | -0.25 |

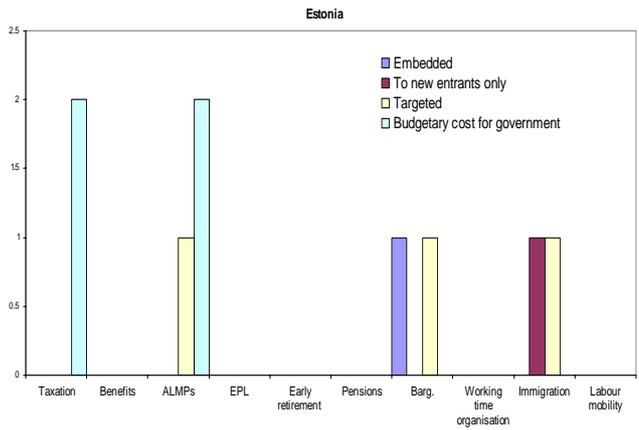
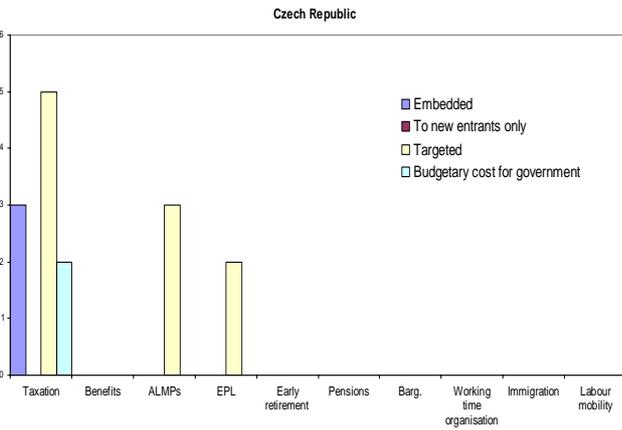
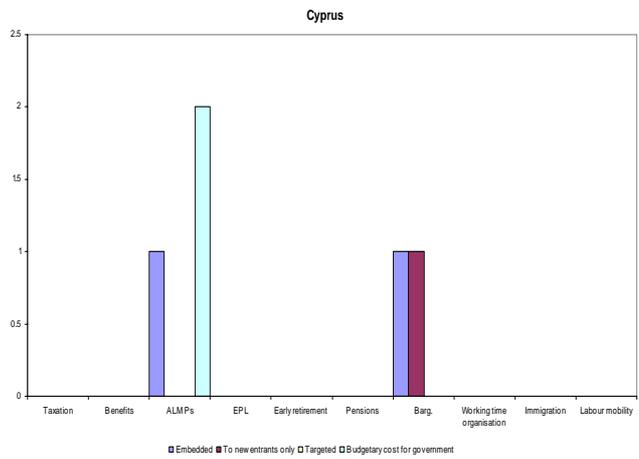
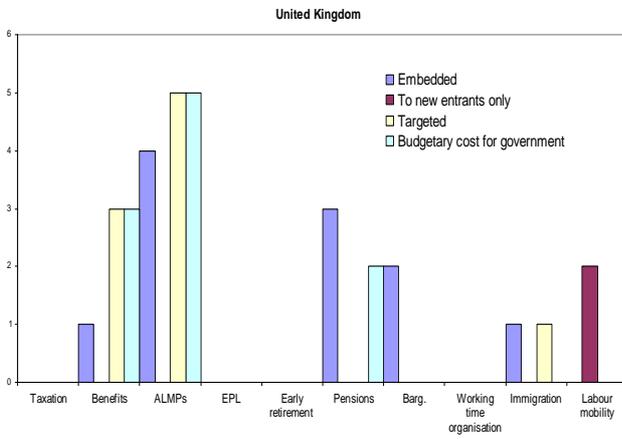
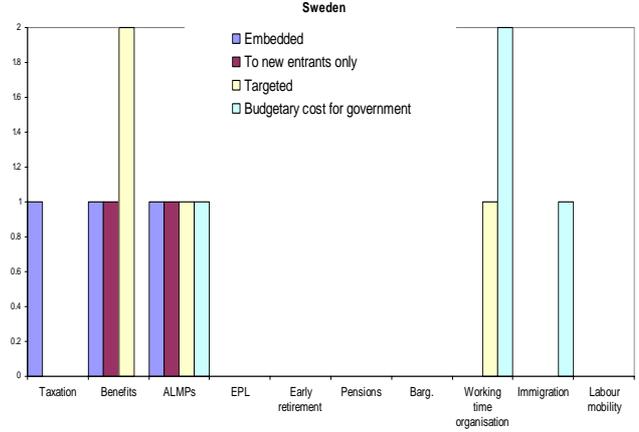
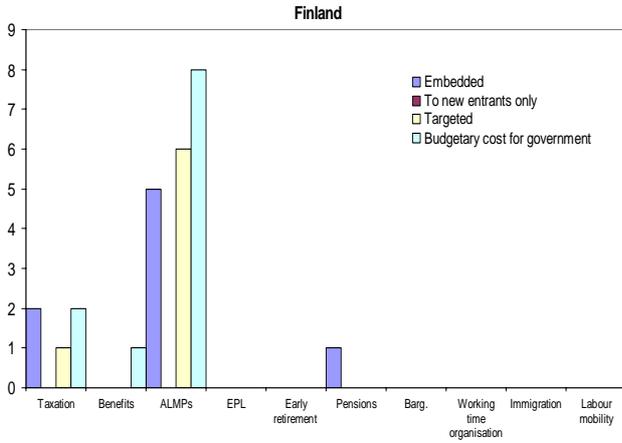
Note: the ACP is on the EU countries Member of the OECD; all variables but EPL are proportion of measures with a specific characteristics.

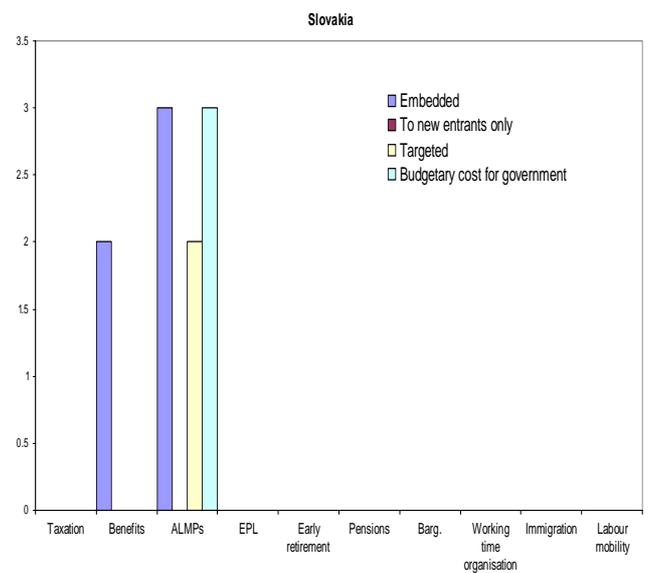
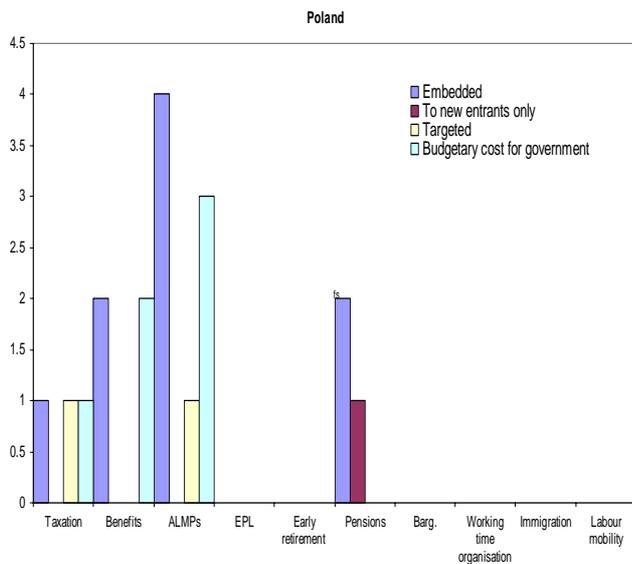
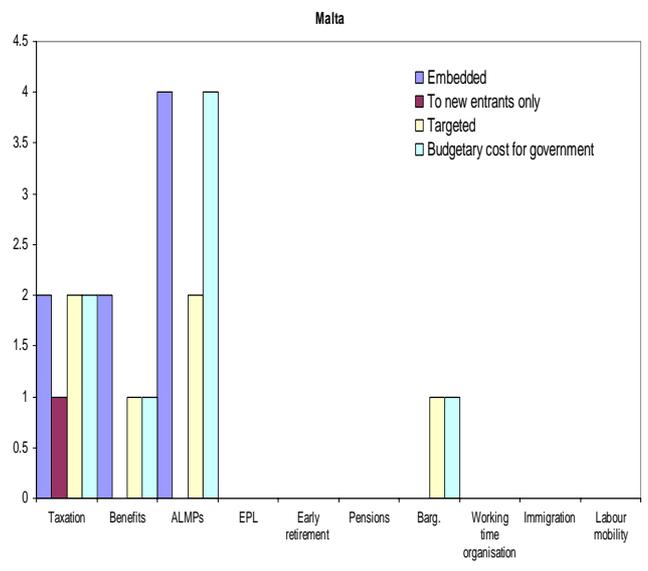
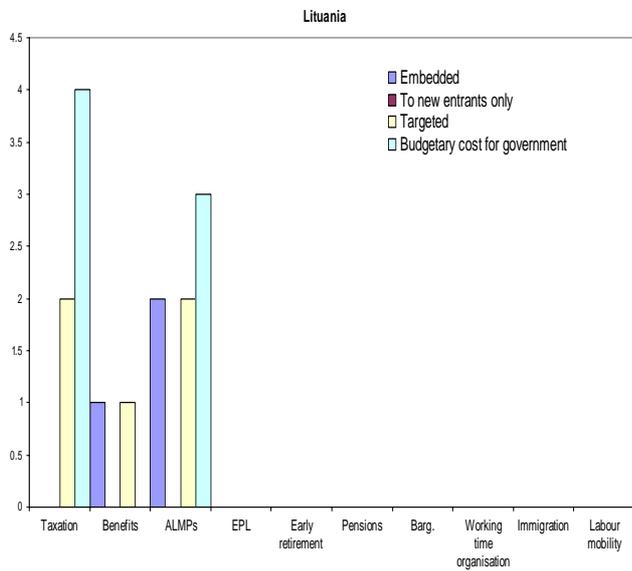
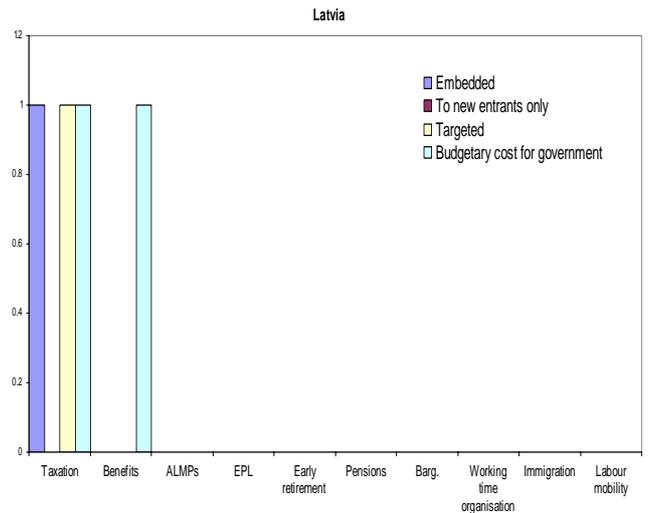
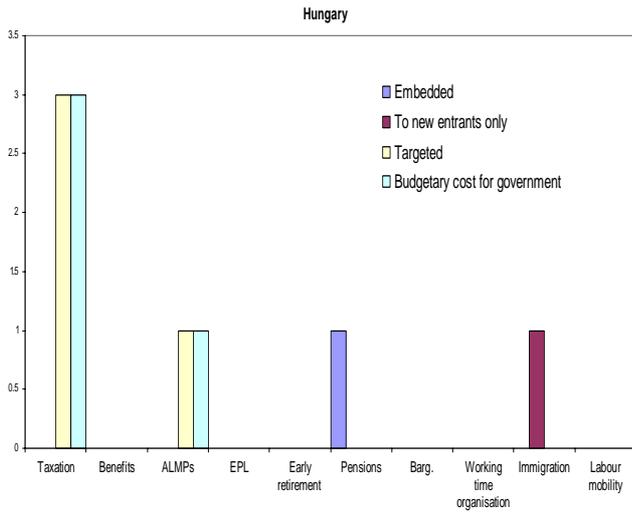
ANNEX 1

Graphs A.1-A.25 Distribution of reforms by reform characteristics

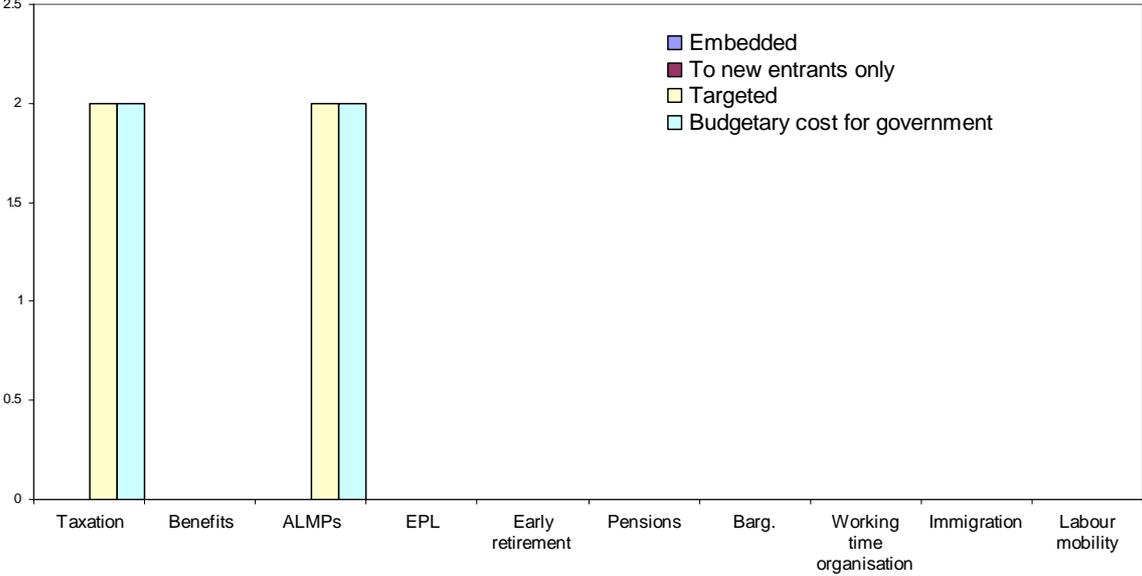




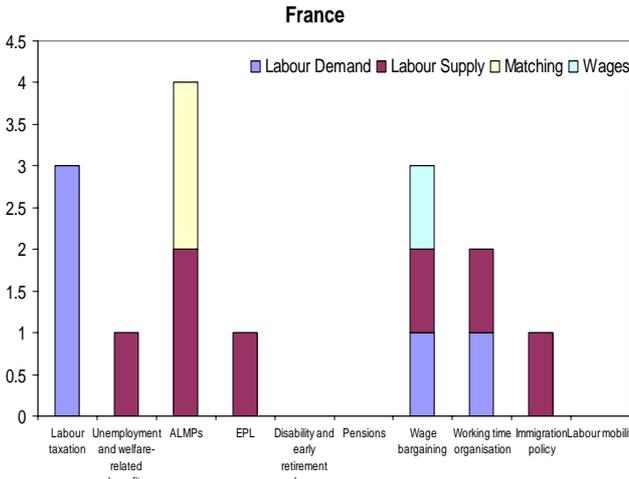
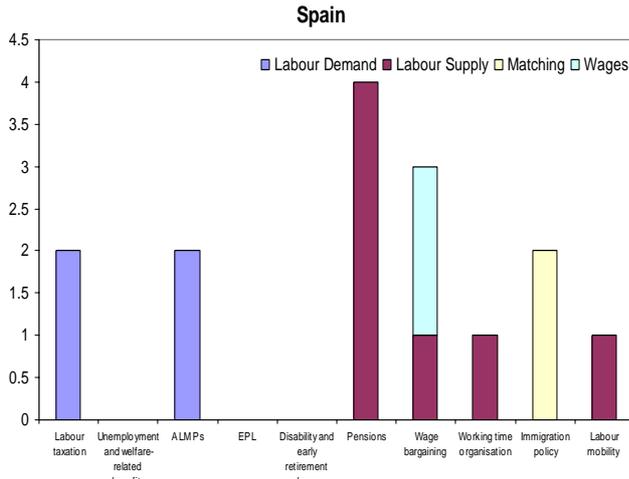
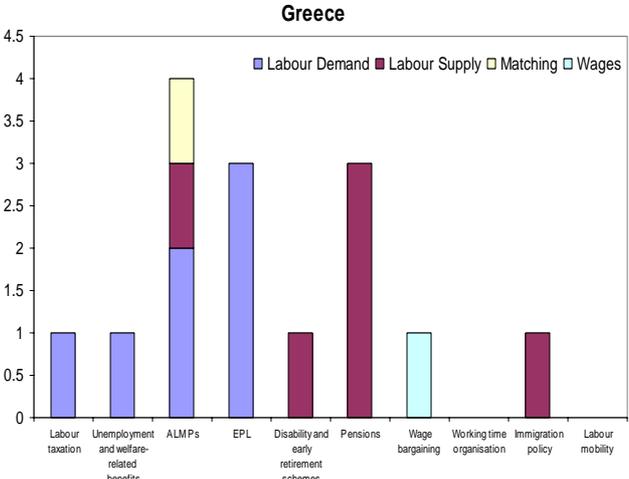
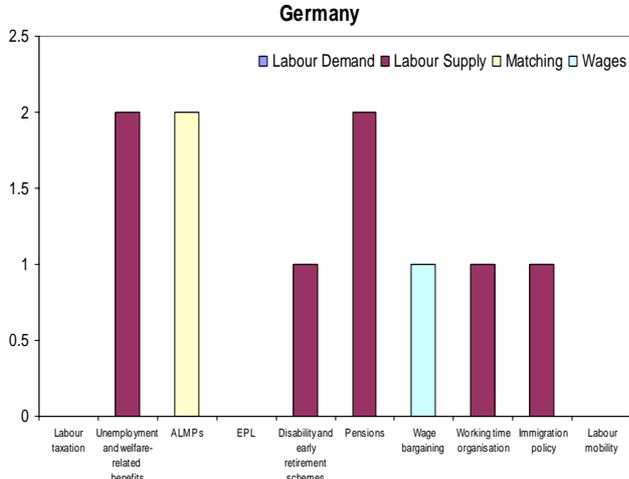
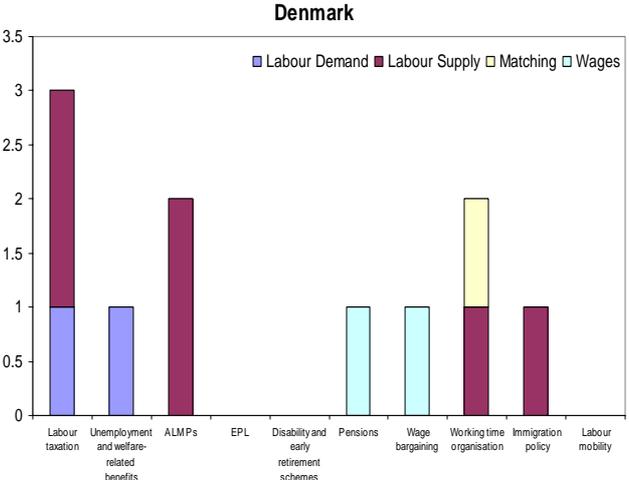


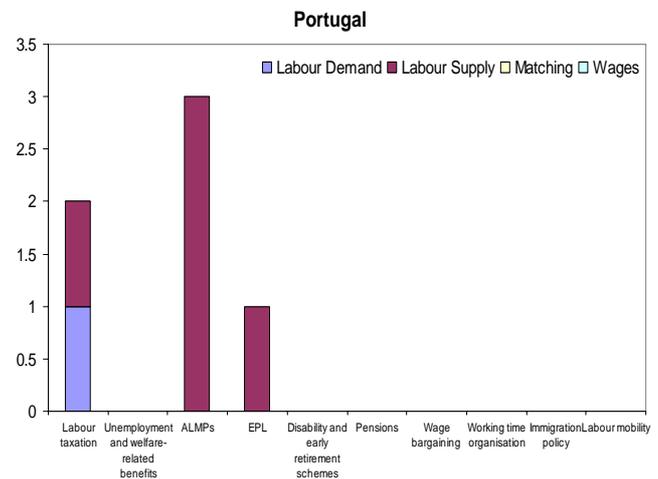
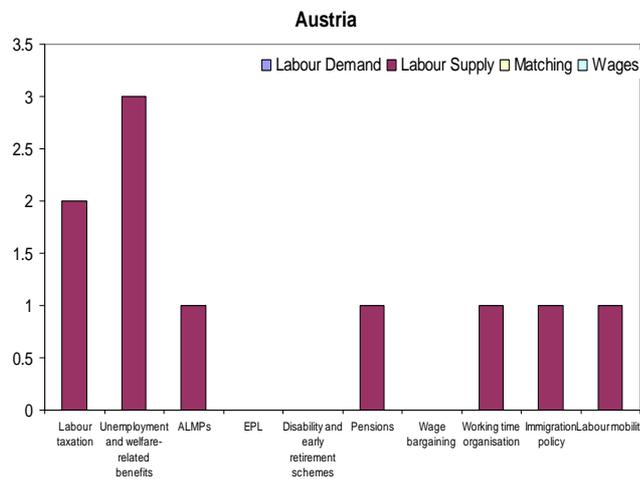
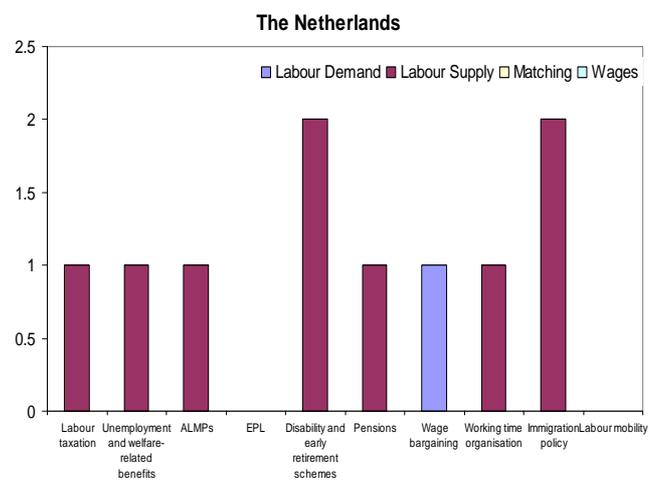
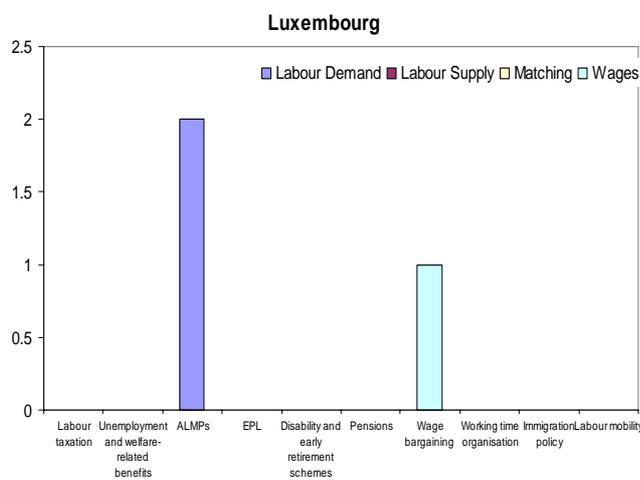
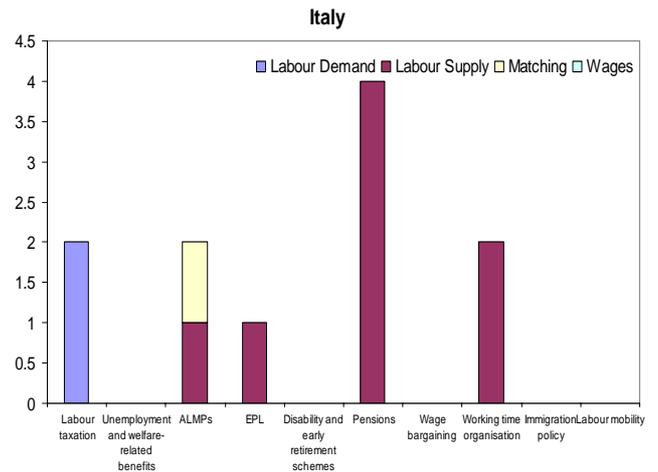
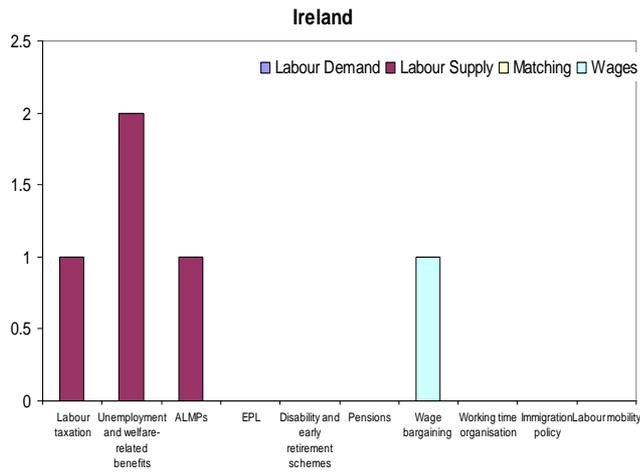


Characterisctcs of reforms in the Slovak Republic: 2004

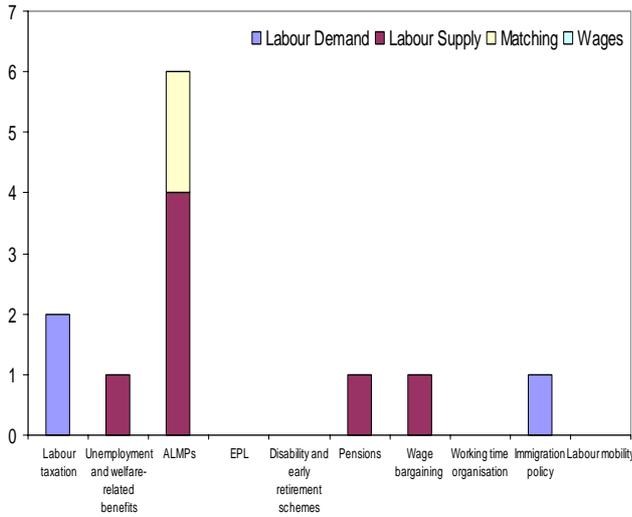


Graph B.1-B.25 Distribution of reforms by area of intervention and expected effects

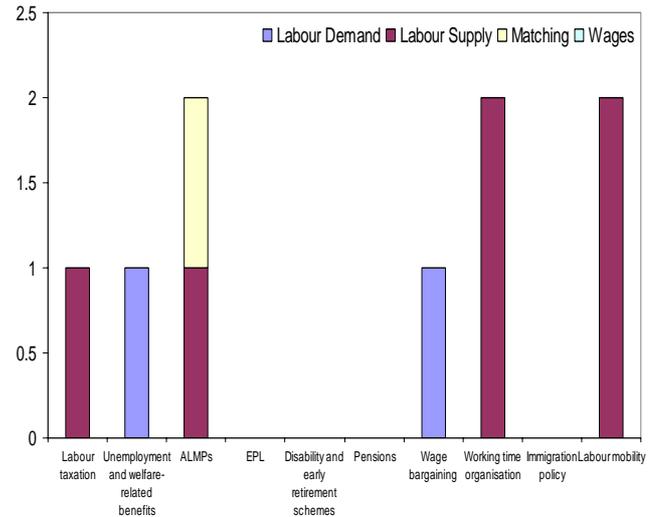




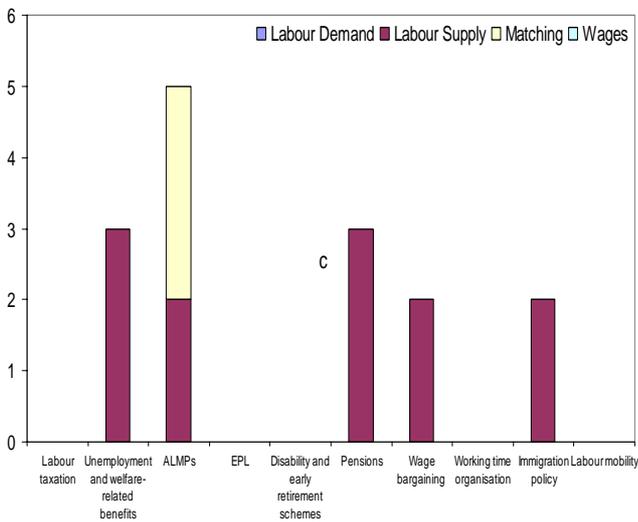
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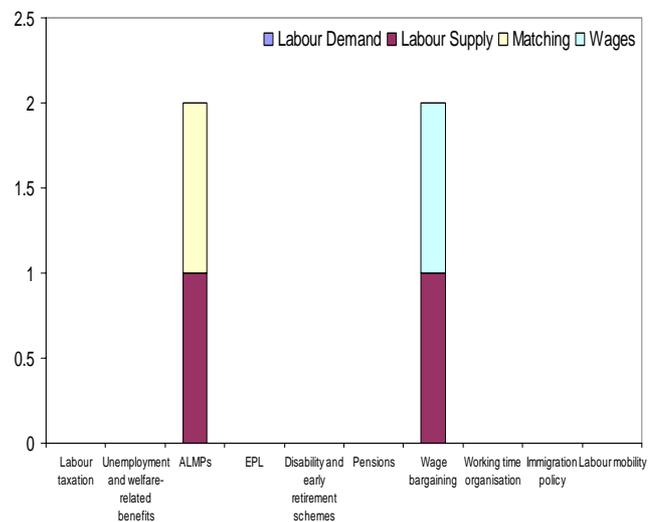
Sweden



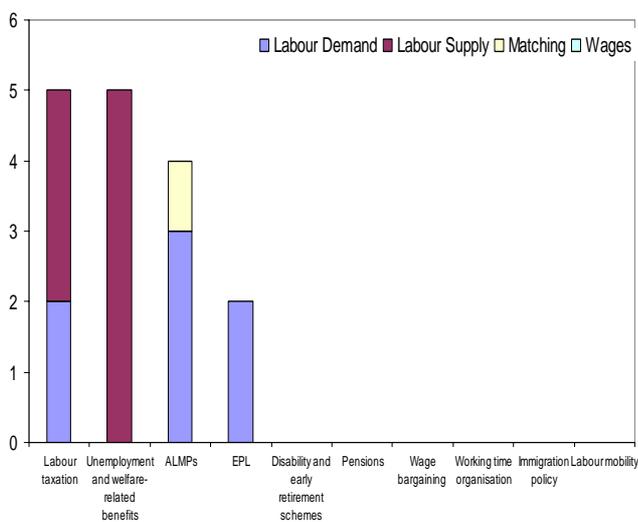
UK



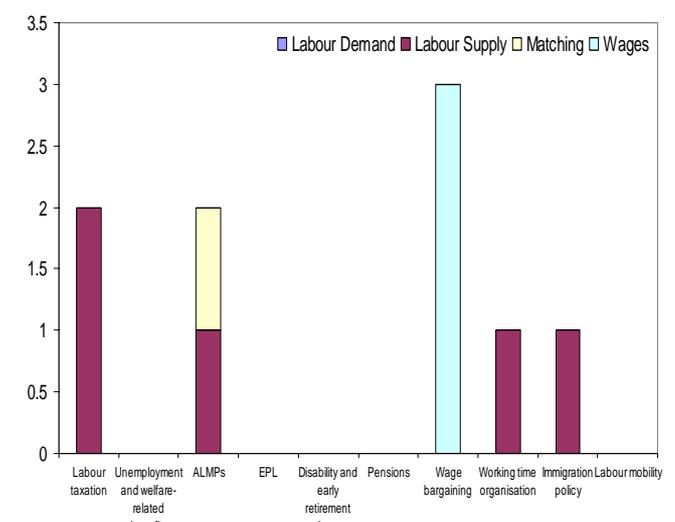
Cyprus

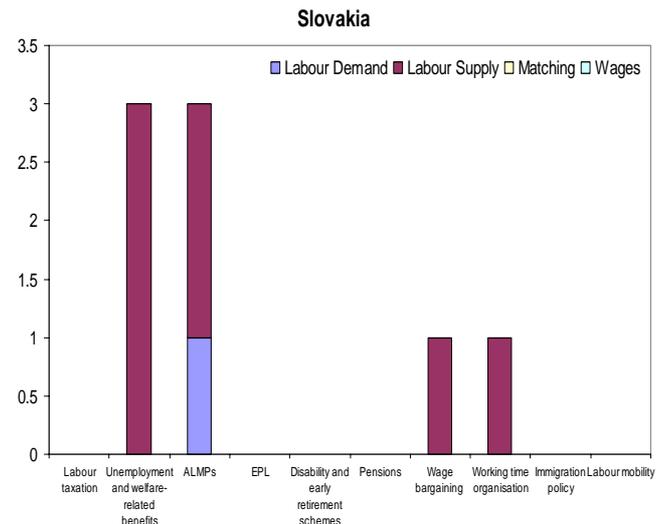
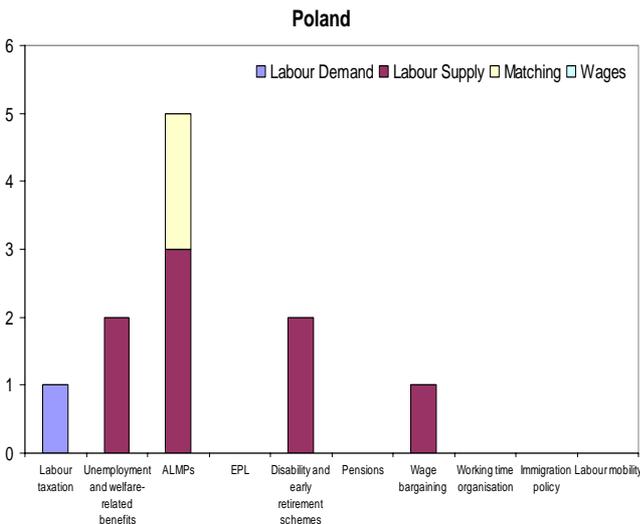
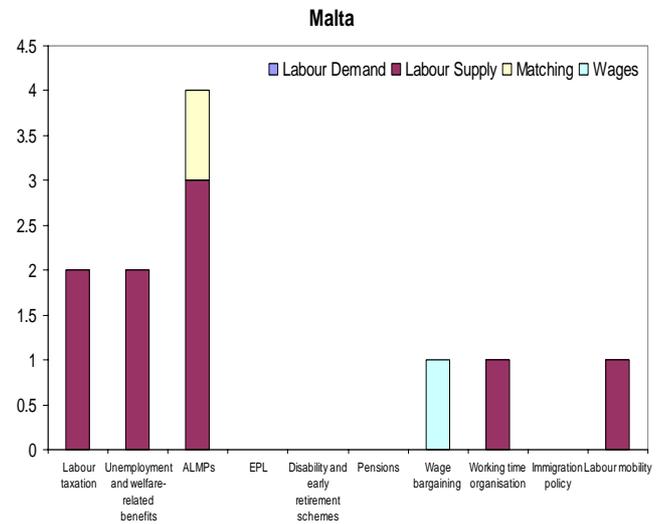
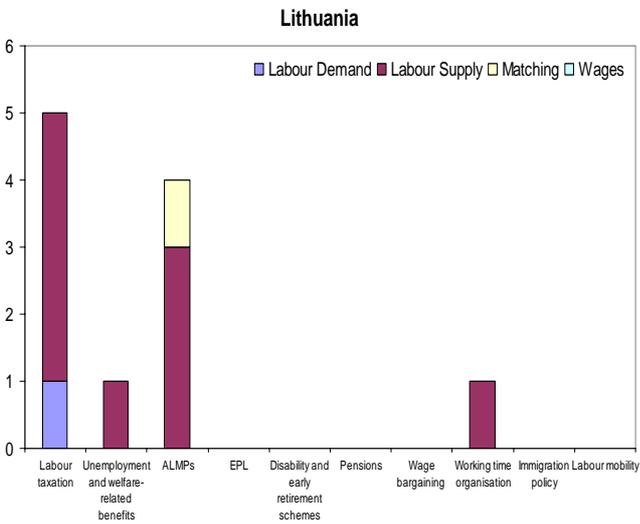
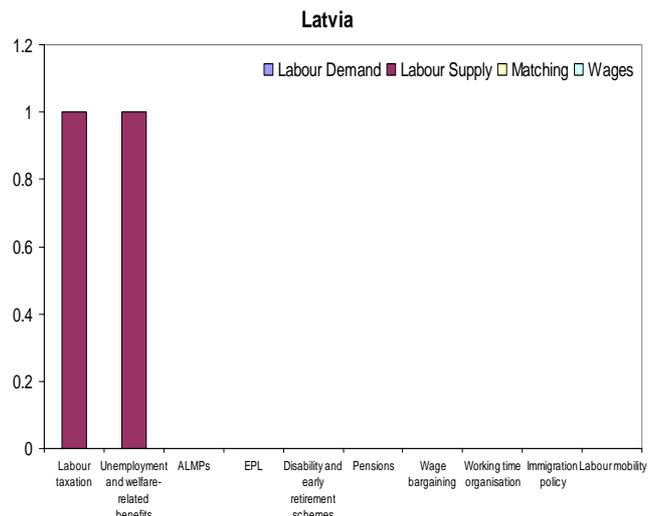
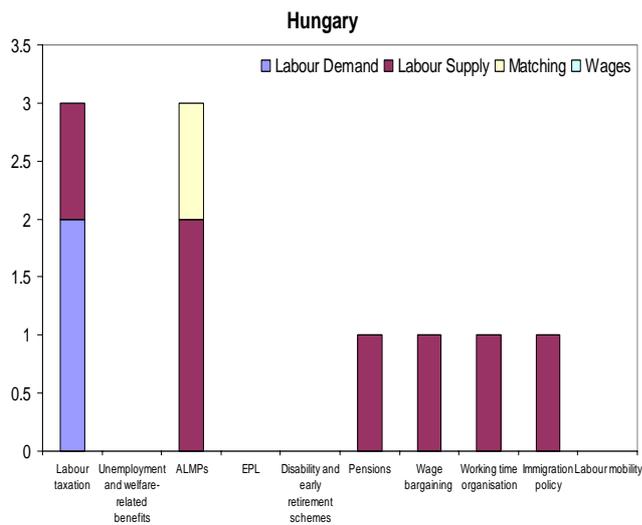


Czech Republic

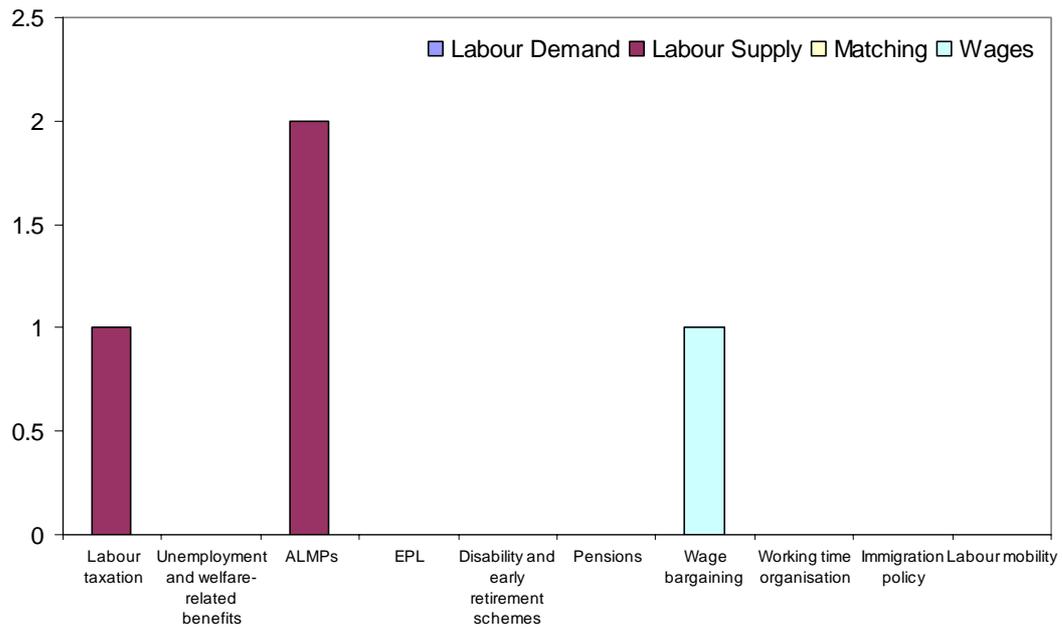


Estonia





Slovenija



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