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## Reforming Labor and Product Markets: Some Lessons from Two Decades of Experiments in Europe

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**IMF Working Paper**

Research Department

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Some Lessons from Two Decades of Experiments in Europe**

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**Abstract**

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This paper evaluates European structural reforms over the last 20 years, in light of economic theory predictions about interactions between labor and product market reforms. Reforms in labor markets occur at higher frequencies than in product market, which are, however, more coherent. These asymmetries can be explained by the nature of political obstacles to reforms in the two domains. Labor market reforms can exploit institutional trade-offs; notably, reforms can trade labor market flexibility with state-provided unemployment insurance and can be applied only to new entrants in the market without affecting the set of regulations applied to existing workers. These two-tier strategies are infeasible in product markets, since incumbent firms can easily drive away new entrants. In product markets, however, it is possible to shift responsibilities to supranational authorities, resisting pressures of national lobbies.

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## I. INTRODUCTION

The different institutional “rigidities” characterizing the European landscape are there because they play some useful function. There is, somewhere, a group benefiting from their presence and lobbying for them. These “rigid” institutions also rarely operate in isolation. There are clusters of institutional rigidities: a regulation in one area calls for regulations in another. The strictness of the regulatory framework is indeed positively correlated across product- and labor markets—the countries with the most restrictive provisions in labor market are also more tightly regulated in product markets.

Removing these “rigidities” is proving extremely difficult. This is not because governments do not wish to carry out reforms, but because they find strong political opposition to them. Available inventories of changes in product- and labor-market regulations in Europe point to an intensification of reform activity especially in the labor market area in recent years. Reforms are mostly marginal, however, rarely encompassing more than a single dimension at time, and sometimes undone in the following years (even by the same government!) by measures going in the opposite direction.

Interactions between product- and labor markets also are relevant in terms of reform efforts. Regulatory changes of labor markets are more frequent at times of increased competitive pressures on product markets (e.g., they increased following progress being made in the completion of the EU Single Market Programme and after the introduction of the euro and associated price transparency and capital movements). There is less evidence on the opposite sequence: reforms of labor markets leading regulatory changes in the product market area.

The purpose of this background paper is to contribute to ongoing work on the monitoring of structural reforms in member countries of the Organization for Economic Cooperation and Development (OECD) focusing on areas somewhat neglected by the literature on labor market institutions and on the political economy of redistributive policies. First it reviews reforms, by relying less on aggregate indicators of institutional rigidities and more on detailed and essentially *qualitative* information on reforms, drawn from inventories assembled at Fondazione Rodolfo De Benedetti. Second, it provides a simple framework enabling us to evaluate *interactions* between product- and labor market reforms, which is also key to understand the type of sequencing of reforms in the two areas that we observe in the data. It also surveys literature speculating on the reverse linkage: from labor to product markets. Third, it contributes to the assessment of the political obstacles to reforms, devising four strategies to overcome this opposition. These are the tasks set out for Sections II, III, and IV of this paper, respectively. Section V concludes.

## II. TAKING STOCK OF REFORMS

Available indicators of the strictness of the regulatory framework in the product- and labor market areas, which have been mainly developed at OECD (1997 and 1999a) point

to a high degree of correlation between the two types of rigidities. The countries with the strictest regulations in product markets also feature stronger barriers to dismissals (Nicoletti, Scarpetta and Boylaud, 1999). Figure 1, displaying the values of two aggregate indicators—increasing in the strictness of product market regulation and employment protection legislation respectively—visually confirms the presence of a strong positive correlation between these two institutional features across OECD member countries.

While these cross-sectional clusters of “rigidities” have been documented by the literature even going beyond these aggregate indicators (Bertola and others, 2001; Nicoletti and Scarpetta, 2003; Bertola and Boeri, 2003), much less is known about their time-series properties. This is a serious shortcoming of the literature as labor market and product market institutions are not static at all. Rather, there is evidence of significant reform activity occurring in these areas. It is therefore important to analyze in some depth the nature and scope of these reform efforts as well as their interactions across policy domains.

### **A. Labor Market Reforms**

Our main source of information on labor market reforms in this section is the “Social Policy Reform Inventory” assembled by the Fondazione Rodolfo De Benedetti. It draws on a variety of sources (including country economic reviews carried out by OECD, Income Data Source studies, EC-MISSOC reports, etc.) and it takes stock of reforms carried out in Europe in the field of non-employment benefits (encompassing not only unemployment benefits, but also the various cash transfers provided to individuals in working age), provisions for retirement (relevant in determining participation among older workers) as well as employment protection. It complements the information provided by the OECD indicators in that it offers more insights on qualitative features of institutions and on political opposition to reforms. We may observe significant reform activity even at times in which the regulatory indicator exhibits small changes or no variation at all. This may point to unsuccessful attempts of governments to bypass political resistance to reforms.

Details on the inventory of social policy reforms and on each single regulatory change are offered in the webpage of Fondazione Rodolfo De Benedetti ([www.FRDB.org](http://www.FRDB.org)). Hence, we can confine ourselves herein just to providing information on the criteria followed in the classification of the reforms.

The FRDB inventory of reforms is organized along two main dimensions:

On the one hand, reforms are classified on the basis of their broad orientation, that is, whether they tend to reduce or increase the generosity of public pensions and nonemployment benefits and make employment protection more or less stringent. It should be stressed that increasing rewards from labor market participation not necessarily mean simply phasing out existing cash transfers to nonemployed individuals. They may simply involve the introduction of wage subsidies, employment conditional incentives or just simply activation policies (including sanctions) for beneficiaries of existing schemes.

On the other hand, we distinguish reforms depending on whether they are *marginal* or *radical*. This procedure is done in two stages. At first, we rely on qualitative assessments,

which are based on an evaluation of the scope of the various reforms. In particular, we preliminarily classify as radical those reforms that satisfy at least one of the following criteria:

- Reduce replacement rates at the average production worker (APW) level by at least 10 percent;
- Are comprehensive, that is, do not address just minor features of each cash transfer schemes (e.g., the minimum employment record required to qualify for unemployment benefits), but rather reform their broader design, and
- Involve existing entitlements rather than being simply phased-in for the new beneficiaries of the various schemes (e.g., reforms of employment protection should concern also workers under permanent contracts).

In the second stage of the classification procedure we look at the actual behavior of the series which should be most affected by the reforms and only if we observe a change in the underlying trend of these series we confirm our initial qualitative assessment. Clearly the second-stage of the procedure can only be implemented for the reforms carried out before 1993 as we need a minimum number of observations in order to establish whether a change in the underlying trend has occurred. Sometimes even in the case of reforms done before 1993 the second-stage validation procedure cannot be implemented, as some reforms are followed just a few years after by regulatory changes moving in the opposite direction, undoing part of the initial institutional changes. In all the cases where the second stage procedure cannot be implemented, only the first stage assessment is used. The latter was validated in 85 percent of the cases.

Which series did we use in the empirical validation procedures? It clearly depends on the institutional features subject to reforms. In the case of employment protection we looked at labor market flows, notably unemployment inflows, as previous work has found a strong negative correlation between employment protection and the incidence of unemployment<sup>2</sup>. The impact of reforms on stocks (e.g., employment and unemployment levels or labor force participation rates) can, in any event, only be appreciated when working with long series, something which is not within our feasibility set. In the case of pension reforms, we looked at the dynamics of pension expenditures and revenues earmarked to the public pension funds: we expect radical reforms to significantly affect at least one of the two, thereby altering equilibrium contribution rates (the payroll rates required to clear the public pension budget). Examples of radical reforms are the 1998 Swedish pension reform, as well as the Amato reform carried out in Italy in 1992. Finally, in the case of nonemployment benefits, we used

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<sup>2</sup>See OECD (1999) and Boeri and Jimeno (2003) for a survey of the literature on the effects of EPL on labor market stocks and flows.

proxy outflows from unemployment<sup>3</sup> (or outflows from the live registers to jobs in the countries for which such data are available): we expect radical reforms to significantly affect exit flows from unemployment (unfortunately we have no data on outflows from nonemployment).

The main results of this exercise are summarized in Table 1. The first fact to notice from the table is that, contrary to popular wisdom and to the belief that labor market and social welfare institutions cannot be modified, many changes have occurred over the observation period (lasting 18 years). We counted almost 414 reforms, that is, more than 1.6 per year *and* country. However, the changes have often been marginal (388 out of 414 reforms, that is roughly 95 percent of the regulatory changes did not pass our two-stage procedure identifying radical reforms). Moreover the reforms are almost evenly split between those reducing generosity (increasing rewards from participation) and protection (241 out of 414, that is, about 58 percent) and those moving in the opposite direction. It is also not infrequent to find reforms undoing one another over a few years. These inconsistencies and the marginal nature of most reforms have significantly increased the institutional complexity of the European institutional landscape. In the field of employment protection, for instance, we have assisted to a multiplication of contractual types, with a number of fixed-term and unstable jobs going hand-in-hand with permanent and still heavily protected positions<sup>4</sup>. All this has increased the dualism of European labor markets, making them more segmented not only between insiders and outsiders but also among various types of outsiders.

Table 1 also documents an acceleration of reforms in the last six-year period (roughly corresponding to a Parliamentary term) covered by the data. Moreover, in recent years, reforms would seem to have taken a more well defined orientation in the area of on-employment benefits: here they are, for the most, oriented towards increasing rewards from labor market participation (93 out of 120, that is roughly three reforms out of four). In all areas reforms are still mainly “marginal,” as defined above, and the ratio of marginal to structural reforms has increased since 1990.

It should be stressed that among the reforms which have tightened benefits, increased rewards from participation or reduced employment protection (298, that is, more than one per year and country) not a few (12) have been carried out at times of recessions (negative GDP growth) and some (59) under slow growth (zero to 2 percent GDP growth). Actually, Table 2 suggests that during recessions or at times of economic stagnation it is more frequent to carry out these “politically difficult” reforms than proceeding the other way around while pressures to increase generosity are strong under buoyant macroeconomic

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<sup>3</sup>Proxy outflow rates are computed as follows  $O_{t,t+1} = I_{t,t+1} - (U_{t+1} - U_t)$  where O denotes proxy outflows, I inflows and U unemployment levels. All primary data come from the OECD Unemployment Duration database.

<sup>4</sup>To give an example, in Italy, 38 different contractual types have been recently counted by the Statistical Office. The number should have increased to 43 with the “Biagi” 2003 reform.

conditions. In particular, when GDP was growing at more than 2 percent per year, there were 205 difficult reforms, but also 119 reforms doing the popular job of increasing generosity, adding more protections and reducing rewards from participation. However, only four of the politically difficult reforms were radical among those carried out when GDP was growing less than 2 percent per year.

Thus, the view that negative or slow growth prevents reforms does not find support from this dataset. It is true that radical and unpopular reforms are difficult under these circumstances, but when macroeconomic conditions are not too favorable it is more likely that regulatory changes will go in the direction of reducing the generosity of benefits and employment protection rather than the opposite. A tentative explanation for this rather surprising result is that there may be a stronger perception of emergency when macroeconomic conditions are less favorable—recessions are often times of “extraordinary politics”—than during upturns where lobbies are at work to appropriate a larger share of the economic “pie.”

## **B. Product Market Reforms**

Unfortunately, there is not an inventory of reforms in the product market area to draw upon. We were forced in this case to define and measure reforms as changes in the values of the regulatory indicators devised by OECD. This clearly rules out the possibility of reforms moving in opposite direction within the same year, a rather frequent event in the case of labor market reforms. Thus, we are likely to underestimate the total number of reforms occurred in the product market area.

In order to obtain our proxy-reforms, we focused on regulatory indicators for which there was a time-series at yearly frequencies. These cover a few service sectors (airlines, telecoms, electricity, gas, postal services, railways, and road freight) and a range of regulatory areas (barriers to entry, public ownership, constraints to business operation, and, wherever applicable, price controls). As we are particularly interested in evaluating changes occurred in the structure of markets, notably the evolution in the degree of competition in the different industries, we carried out this exercise only limited to the regulations on barriers to entry.

We also focused on the same set of countries (the European Union) covered for labor market reforms. The results of this exercise are displayed in Table 3. Once more, we group reforms per six-year time-periods, and we classify them by orientation (increasing or decreasing competition) and scope (radical if they involve a step change of the indicator corresponding to at least one-third of its potential range, marginal otherwise).

Two facts are relevant. First, in the case of product markets there are much less reforms going in opposite directions: regulatory changes are for the most aimed at increasing competition in all industries. This may be partly due to the fact that we do not identify mutually offsetting reforms occurring within the same year. Yet, the differences with respect to the inconsistencies of labor market reforms are quite striking and are confirmed when defining labor market reforms with the same approach that we were forced to use for product market reforms, that is, looking at changes in the values of indicators. Second, there are

relatively more “discrete” reforms in product markets than in labor markets. These asymmetries in the nature of reforms between the two policy areas survive also when defined for consistency labor market reforms as (net) changes in the indicators.

It would also seem that, in the case of product markets, the acceleration of reforms has taken place mainly in the first half of the 1990s. Although available series cover only the period up to 1998, qualitative information on the more recent years suggests that there have been much less reform activity in product than in labor markets. In particular, in the 2002–03 period, OECD counted nine reforms in the labor market area (and another six being proposed by governments, but not yet implemented) and five in the product market area (with another three being proposed).

Unlike labor market reforms, regulatory changes in product markets tend to be more concentrated in periods of strong recovery (Table 4). They also do not point to a convergence across countries in the degree of liberalization of product markets. The countries with more regulated product markets to start with are not necessarily those doing most effort in liberalizing them. In the case of labor markets, instead, we observe a significant and positive correlation between the number of reforms reducing the strictness of employment protection and the initial value of the Employment Protection Indicators (EPI) index, which suggests that countries most “rigid” are indeed more active in liberalizing labor markets (Figure 2).

### **III. INTERACTIONS BETWEEN LABOR AND PRODUCT MARKET REFORMS**

#### **A. More Pressures for Reform, but also more Opposition to Change**

The above points to an intensification of reform efforts, notably in the labor market area in recent years. Importantly this greater reform effort has not been paralleled by major variations in the values of the OECD aggregate indicators of labor market regulation. There are many reforms, but not much change in the aggregate indicators of the strictness of employment protection (Figure 3) or in the generosity of unemployment benefit systems.

A possible interpretation of these developments is that there have been important changes in the environment in which these institutions operate, which have, on the one hand, increased the distortions associated with having these institutions in place and, on the other hand, induced stronger demand for protection. This would explain the greater reform efforts, but also the higher obstacles that they face.

What type of environmental change may have occurred in Europe in the 1990s? A key development has been the reduction of trade barriers and the progress made in the implementation of the Single Market Programme. A more recent event is the introduction of the euro and its effects on capital flows and price transparency.

These events have been extensively characterized elsewhere (Aghion and others, 2003; Blanchard, 2003; Bertola and Boeri, 2003; Buti and Sapir, 1998). Hence we can confine ourselves herein just to recalling a few facts, which may be useful especially for the non-European reader.

The first fact is the significant progress made in dismantling trade barriers in Europe. Figure 4 documents this development. It suggests that the reduction in trade barriers has occurred uniformly across the board, as the distance between the upper and the lower bands in the figure has narrowed down in this process, which likely points to co-coordinated action at the EU level.

Also the second fact relates to initiatives at the level of EU supranational authorities. We refer to the progress made in the buildup of a Single Market for goods in the Union. Since the completion of the internal market in 1979, product market regulations of current EU members have indeed been significantly reformed, with the dismantling of many implicit barriers to the mobility of goods. This process has been led by the European Commission, whose role was laid down by the influential Delors' White Paper of the mid-1980s. It established the principle according to which "a product lawfully manufactured and marketed in one Member state, there is no reason why it should not be sold freely throughout the community." The European Commission has been quite effective in enforcing these principles via disciplines like mutual recognition on case-law. There are still product markets, notably services, relatively sheltered from competition and these account for roughly 50 percent of EU GDP. Moreover, most of the sheltered sectors supply inputs to other productions, e.g., agriculture, energy and automotive parts, which clearly reduces the scope of price competition also in the industries heavily using these intermediate inputs. Yet, price competition in manufacturing is relatively high and trade, notably of the intra-industry type, has been constantly increasing<sup>5</sup>. FDIs have also picked up as intra-EU foreign direct investment inflows currently account for more than 1 percent of the European Union GDP (from less than 0.25 of that in the late 1970s). Several measures of economic integration, e.g., defined on the basis of clustering techniques over macroeconomic series and the structure of private consumption (OECD, 1999b) point to increasing market integration within the EU.

The third fact which may have increased competitive pressures is EMU. As is well known, the irrevocable fixing of exchange rates in the euro area is operational since January 1, 1999, whilst the Growth and Stability Pact was adopted in 1997, setting a legally binding framework for fiscal policy in the euro area. Expectational effects of EMU implementation have been felt even before 1997, and can be traced back to the adoption of the Maastricht Treaty.

## **B. A Simple Model of Rent-Sharing and Market-Reducing Institutions**

A simple model of labor demand and supply and endogenously determined institutions, developed by Bertola and Boeri (2003), is useful to illustrate the potential interactions between competitive pressures in product markets and labor market reforms.

Let us begin by characterizing labor demand. We assume that technologies are of the constant-elasticity type and labor,  $l$ , is the only input in production. Profits are maximized

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<sup>5</sup>Cf. OECD (1999b).

when the cost of employing one unit of labor,  $w_d$ , is equal to the value of the marginal product. The reduced form of such condition can be written as

$$w_d = Al^{-\eta} \quad (1)$$

where  $A$  is an index of labor productivity and  $\eta$ , the inverse labor demand elasticity, is bounded between zero and one. Note that equation (1) implies a downward sloping labor demand for labor. A decrease in  $\eta$  can be interpreted as an *increase* in product market competition that reaches the competitive limit as  $\eta$  goes to zero.

On the supply side of the labor market, take-home pay  $w_s$  is positively related to the size of the labor force, again according to a constant-elasticity functional form:

$$w_s = l^\varepsilon. \quad (2)$$

The elasticity parameter may range between  $\varepsilon = 0$  (in which case the opportunity cost of working is constant, and normalized to unity) and larger values indexing increasingly inelastic labor supply schedules. As  $\varepsilon$  tends to infinity, labor supply  $l = (w_s)^{\frac{1}{\varepsilon}}$  tends to a constant, also normalized to unity in this formalization.

### Competitive Equilibrium

As a benchmark model we consider the wedge-free equilibrium where  $w_s = w_d$ . Neglecting constants of integration (indexed by  $\xi$ ), total production is

$$\int_{\xi}^l Ax^{-\eta} dx = \frac{A}{1-\eta} l^{1-\eta}$$

if marginal productivity is given by (1). Similarly, the opportunity cost of working is

$$\int_1^{\xi} x^\varepsilon dx = -\frac{l^{\varepsilon+1}}{\varepsilon+1} l^{1-\eta}$$

when labor supply is given by (2). Under perfectly competitive conditions both employers and workers take wages as given, and the equilibrium solves

$$\max_l \left( \left[ \frac{Al^{1-\eta}}{1-\eta} - wl \right] + \left[ wl - \frac{1}{\varepsilon+1} l^{\varepsilon+1} \right] \right) = \max_l \left( \frac{Al^{1-\eta}}{1-\eta} - \frac{1}{\varepsilon+1} l^{\varepsilon+1} \right)$$

that is, it maximizes the sum of firm's profits and of the workers' surplus from employment. The resulting wage and employment levels are

$$w_s = w_d = A^{\frac{\varepsilon}{\varepsilon+\eta}}, l = A^{\frac{1}{\varepsilon+\eta}} \quad (3)$$

respectively. As is well-known, this competitive outcome maximizes the *total* surplus of production over the opportunity cost of employment, or the size of the economic “pie” generated by the labor market, and features zero unemployment.

In the absence of lump-sum redistribution, however, this equilibrium needs not to be politically sustainable or desirable from the standpoint of a social planner maximizing an objective function which embodies distributional concerns.

### Bilateral monopoly

Suppose that there is indeed a distributional conflict between employers and employees over the total surplus generated by the economy, and assume that wages are set by a bilateral bargaining process. Wages in this case would maximize the objective function

$$\max \left( \left[ \frac{Al^{1-\eta}}{1-\eta} - wl \right]^\beta \left[ wl - \frac{1}{\varepsilon+1} l^{\varepsilon+1} \right]^{1-\beta} \right) \quad (4)$$

where the parameter  $\beta$  measures the relative bargaining power of the two groups. To obtain the solution of the wage, we assume that employment is on the labor demand schedule<sup>6</sup>. The solution to this problem reads

$$w = (\mu)^{\frac{\eta}{\varepsilon+\eta}} (A)^{\frac{\varepsilon}{\varepsilon+\eta}}, \quad \text{with } \mu \equiv \left( 1 - \beta \frac{\eta + \varepsilon}{1 + \varepsilon} \right) \frac{1}{1 - \eta} \quad (5)$$

which shows that the equilibrium wage is described by an optimal mark-up factor of wages over the opportunity cost of working.

### Comparing the two outcomes

As is apparent from the above, this outcome will coincide with the competitive equilibrium when

$$\frac{\beta}{1-\beta} = \frac{\eta}{1-\eta} \frac{1+\varepsilon}{\varepsilon},$$

The above implies that  $\mu = 1$  and which conceptually similar to the condition derived by Hosios (1990) in a matching framework. As in a matching environment, this social efficiency condition can only be satisfied by chance if the “bargaining share”  $\beta$  happens to equal a product of the elasticity of demand and supply. Notice further that the bargaining share compatible with the competitive equilibrium outcome (hence, with zero unemployment) is decreasing in the elasticity of demand, and supply. There is no reason to expect that  $\beta$  would adjust to changes in the two elasticity parameters, when there is just individual bargaining. In the latter case,  $\beta$  can be simply interpreted as a subjective discount factor, reflecting the relative impatience (hence weakness) of the two parties at the bargaining table. However, insofar as  $\beta$  is a reduced-form representation of allocation mechanisms different from perfect competition, then it may be expected to react to changes in  $\varepsilon$  and  $\eta$ , e.g., brought about by increased product market competition. The extent to which  $\beta$  reflects such considerations will depend on the nature of unions—whether they are sufficiently “encompassing”—and on their internal decision-making process. Pissarides (1990) as well as Boeri and Burda (2003) show that when unions objectives encompass the welfare of currently unemployed workers or at least take into account the average time spent

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<sup>6</sup>In other words, we use the right-to manage convention of maximizing (4) with respect to  $w$  under the constraint that  $l = (w/A)^{-\frac{1}{\eta}}$ .

in unemployment by the median member, then  $\beta$  can get quite close to the Hosios condition. An equilibrium maximizing the objective function (4) can also be obtained by a statutory minimum wage unilaterally set by a democratically elected government,<sup>7</sup> in which case it would reflect the preferences of the median voter along the unemployment-redistribution trade-off. This minimum wage would prevent individual workers from bidding for work at lower wages, which means that there will be some unemployment, i.e., some individuals would be willing to work at the going wage and could not obtain a job. Another way to implement the bargained/distributional optimum is by leaving the work choice to individuals, but inserting a wedge between employer cost and take-home pay (see Spilimbergo, 1999, for a discussion of tax and subsidy determination in a similar context), in which case it would also reflect preferences of the median voter. Insofar as the competitive equilibrium is inconsistent with distributional objectives, then a scheme taxing employment and distributing proceeds to nonemployed workers—as in the countries applying the so-called “Ghent system,” with unions involved in the running of unemployment benefit systems (Boeri, Brugiavini and Calmfors, 2001)—can be legitimized<sup>8</sup> in terms of (4). The optimal tax from the labor’s point of view would be such that employment is the same with the tax (and equilibrium between labor supply and demand) as with the markup enforced via binding wage contracts (and unemployment). Thus, the optimal tax rate would also be decreasing as labor demand becomes more elastic.

Summarizing, the distributive objective represented by the sharing rule can be implemented either by a labor tax rebated to workers and their families (which involves a reduction in the aggregate labor force) or via minimum wages and/or administrative extension of collective wage agreements (implying unemployment rather than exit from the labor force) or via combinations of the two types of mechanisms. These politically supported equilibria (or outcomes of collective bargaining) should somewhat take into account the dis-

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<sup>7</sup>Equation (4) can also be interpreted as a distributionally-weighted, Nash-Bernoulli, social welfare function, in which case it is the government to set a statutory minimum wage for this economy.

<sup>8</sup>In the bargained equilibrium, marginal productivity is equal to employers' costs,

$$w_d = (\mu)^{\frac{\eta}{\varepsilon+\eta}} (A)^{\frac{\varepsilon}{\varepsilon+\eta}}$$

and the resulting employment level  $l_d = (A/\mu)^{\frac{1}{\varepsilon+\eta}}$  is equal to labour supply when take-home pay is

$$w_s = (l_d)^\varepsilon = \left(\frac{A}{\mu}\right)^{\frac{\varepsilon}{\varepsilon+\eta}}$$

The ratio of demand and supply wages is  $\mu$ , so the labour tax rate, as a fraction of gross employer wage costs, is  $\mu - 1$ . There is no need to tax employment and redistribute the proceeds to workers (in the form of pensions, non-employment benefits, and public employment) if  $\mu = 1$ .

employment bias induced by redistributive policies. The latter is obtained by comparing the competitive outcome and the bilateral monopoly equilibrium. The latter is given by

$$l_d = \left(\frac{w}{A}\right)^{-1/\eta} = \left(\frac{A}{\mu}\right)^{\frac{1}{\varepsilon+\eta}} \quad (6)$$

which involves lower equilibrium employment than competition when the markup  $\mu$  is larger than unity (when the equilibrium with distributional concerns does not happen to coincide with the competitive equilibrium).

### **The effects of an increase in competition in the product market**

Suppose now that labor demand becomes more elastic, i.e., that  $\eta_0 < \eta_1$ , as a result of greater competition in product markets. We want to discuss the effect that the increase in product market competition brings to the rest of the economy. We do this in two steps, which we can label short-run and medium-run effects (or “no reform” and “reform” scenarios). In the *short-run*, labor market institutions do not (immediately) adjust to these environmental changes. In this case the two employment levels are given by

$$l_0 = \left(\frac{A}{\mu}\right)^{\frac{1}{\varepsilon+\eta_0}} < l_1 = \left(\frac{A}{\mu}\right)^{\frac{1}{\varepsilon+\eta_1}} \quad (8)$$

In the short-run, when the mark-up is fixed at  $\mu$ , an increase in product market regulation leads to an employment bias. Unless increased product market competition involves improvements in production technologies (a larger  $A$ ), e.g., brought about by the externalities associated with having a larger market, the employment bias of redistributive policies is likely to be larger in economies with liberalized product markets.

In the long-run, labor market reforms are allowed to operate in response to changes in product market competition. The increase in product market competition fosters labor market reform, adjusting the value of the labor market parameter  $\mu$ . It is easy to show that a fall in  $\eta$  leads to a subsequent fall in  $\mu$ , which gets closer to the competitive outcome where  $\mu = 1$ .

Thus result (8) shows that an increase in product market competition leads to pressures to reform the labor market institutions which created the wedge with respect to the competitive outcome. At the same time, however, unreformed labor markets have worse employment outcomes than before product liberalization. This suggests that product market liberalization increases opposition to labor market reforms.

Which type of reform of labor market institutions are we talking about? It depends on the type of institutions which have been put in place to start with in creating the wedge. It may be a relaxation of employment protection, a lowering of the minimum wages or a reduction in the scale of the tax and transfer scheme providing income support to people out of work. A key prediction of this model is that increased competitive pressures coming from the product market increase at the same time pressures for reform and opposition to it.

### C. Exploring the Reverse Casual Link

A broad implication of the model above—and of all models where wage setting obeys a rent-sharing rule<sup>9</sup>—is that product market deregulation increases pressures to reform labor market institutions, and more broadly, redistributive policies. How about the reverse causal link, the one going from labor market liberalization to reforms of the product market?

Valuable insights come in this respect by a model developed by Blanchard and Giavazzi (2003) who consider first *labor market deregulation* at given product market regulation. Specifically, Blanchard and Giavazzi consider the effects of a decrease in the bargaining power of workers. In the short run, workers give up rents; such a reduction of rents clearly leads in the short run to a decline in the real wage, and an increase in profits. In the Blanchard and Giavazzi model, though, the change in factor income distribution which results from the change in workers' bargaining power has no impact on unemployment. Thus, workers clearly lose out in the short run. In the long run, however, the larger rents left to firms lead to entry of new firms until the profit rate stabilized back to the long-run equilibrium level. As more firms enter the market, competition increases, the markup decreases, leading to a decrease in the unemployment rate, and an increase in the real wage. Indeed, in the long run, the unemployment rate is lower than before the deregulation.

In other words, labor market deregulation operates by altering the distribution of rents in favor of firms, leading to more competition in the long run, and lower unemployment. Thus, in the short run, a reduction in the bargaining power of workers does no more than simply redistributing rents between workers and firms. In the long run, however, entry of firms, induces changes in the level of unemployment. Labor market deregulation comes with a sharp intertemporal trade-off: lower real wages in the short run in exchange for lower unemployment in the long run.

Note that the Blanchard and Giavazzi framework can also be used for studying product market deregulation in specific industries at given labor market deregulation, which nicely complements the framework discussed in Section III. B. Goods market deregulation, in one form or another, leads in the long-run to the entry of new firms and to the reduction in overall firms' mark-ups, with favorable effects on workers, since lower mark-ups lead to an increase in real wages and in employment. But the positive effects of deregulation on employment work mainly in general equilibrium, since they take place despite a reduction of rents at incumbent firms. Indeed, in general equilibrium, the reduction in prices more than offsets the reduction in rents of incumbent firms, with positive effects on employment. The situation becomes more complicated if deregulation affects only part of the economy, e.g., because the rest of the system remains heavily regulated. In this case, employment in existing firms may fall, with an adverse effect on unemployment. *This reasoning provides a rationale for workers opposing product market reforms in spite of the positive effects that these may*

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<sup>9</sup>See Saint-Paul (2000), Appendix to Chapter One, for an excellent survey of these models.

*have on employment (and real wages, due to the decline in prices<sup>10</sup>)*. This is because product market deregulation tends to be confined to specific sectors, and hence have large partial equilibrium effects (reduced rents in a sector means lower wages for the workers employed in that industry) and rather small general equilibrium effects. It is the segmentation of product market reforms which creates a large constituency against the change. Put another way, product market reforms should be sufficiently widespread in order to win political support, as we will discuss further in Section IV.

#### **IV. HOW TO WIN POLITICAL SUPPORT FOR REFORMS?**

The above framework suggests that increased product market competition puts considerable pressure on institutions which reduce the size of the labor market. At the same time, increased competition increases the demand for protection, providing powerful weapons to the opponents to reforms. In this section we discuss first how the resistance to labor market deregulation can be reduced and, subsequently, what can be done to speed up reforms in the product market area, which, according to our framework (and consistently with the evidence reviewed in Section II), would also have an impact on the labor market.

##### **A. Exploiting the Institutional Trade-offs**

Any politically feasible trajectory of reform of labor market institutions should recognize the rationale behind these regulations. Many of these provisions deal not only with the distributional tensions considered in Section III, but also with market imperfections, especially as regards the possibility to obtain insurance against adverse human capital shocks idiosyncratic shocks to demand, etc.. Another important factor to be taken into account is that there are alternative ways, different instruments, to deal with these market imperfections. All this means that reforms need not take the form of simple deregulation, while they can exploit the substitutability between different regulations.

A relevant example is provided by the so-called “UB/EPL trade-off”: unemployment benefits (UBs) and firing costs or, more broadly, employment protection legislation (EPL) offer two alternative ways of protecting individuals against the risks of being unemployed. While EPL protects those who already have a job, and does not impose any explicit tax burden, UBs generally provide insurance to a larger portion of the labor force and are financed by a tax imposed on labor income. Economic theory provides a rationale for the substitutability between EPL and UB. Models assigning a welfare-enhancing role to these institutions (e.g., Pissarides, 2001) show that—when severance payments and notice periods in case of dismissals are chosen optimally—there is no role for unemployment insurance. The two institutions may also have important design features in common. For instance, when EPL involves only transfers from the employer to the employee (i.e., it is a severance cum notice period scheme), it may collapse to an experience-rated unemployment insurance

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<sup>10</sup>Blanchard and Giavazzi model preferences á la Dixit-Stiglitz, love for variety, type. A larger number of firms-products, in this context, implies a lower quality-weighted price for the composite good.

scheme. However, job security provisions, in addition to payments from the employer to departing employees, typically involve judicial or administrative costs that are deadweight from the view point of the individual employment relationship.

European countries use different combinations of the two institutions. Plotted against each other, measures of the generosity of the two institutions point to the presence of a trade-off between EPL and UBs (Figure 5): those countries, which adopt stronger dismissal restrictions, tend to enjoy smaller unemployment insurance programs, and vice versa. In particular, Figure 5 displays, on the vertical axis, an index of the strictness of employment protection compiled by the OECD (OECD, 1999) on the basis of an assessment of national legislations, while the horizontal axis indicates the so-called generosity index, that is the coverage of unemployment insurance and unemployment assistance<sup>11</sup> (the fraction of unemployed receiving some form of UBs) times the net replacement rate (unemployment benefits in the first year of unemployment as a fraction of the previous wage, both net of taxes).

The trade-off has also been documented at the micro level. In particular, Boeri, Boersch-Supan and Tabellini (2001) found that individuals, who consider themselves to be protected by EPL, are less willing to purchase state-provided unemployment insurance and their willingness to pay for UBs is lower than for individuals with a high subjective risk of job loss.

Why do countries resort to different combinations of employment protection and unemployment insurance to protect the individuals against the risk of being unemployed? Ongoing theoretical work (e.g., Boeri, Galasso and Conde-Ruiz, 2003a and 2004) suggest that such different configurations may correspond to cross-country differences in human capital endowments, age structure of the population, depth of capital markets as well as to the degree of redistribution operated by the tax and transfer system. In particular, countries in which the median voter is a low-skilled insider, where capital markets are relatively underdeveloped, where there is a larger share of elderly workers, and where the social welfare has rather poor targeting properties may demand more EPL and less UB.

Under stronger competitive pressures and higher exposure to global demand shocks (Ljungqvist and Sargent, 2002), a case can be made for substituting employment protection regulations with temporary unemployment insurance, which can better reconcile worker protection and mobility, especially when job search effort is appropriately monitored. Similarly, search assistance, as well as a framework of subsidized training (or ‘lifelong

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<sup>11</sup>A low coverage of UBs may also be associated with high youth unemployment rates—which tend to be positively correlated with EPL—as first-time job-seekers typically do not qualify for UBs. However, the negative correlation between UB and EPL is stronger when concentrating on central age groups, whose unemployment rate was found, in many cross-sectional studies (e.g., see OECD, 1999), to be uncorrelated with EPL. This negative correlation holds also when choosing alternative measures of UB generosity, such as net replacement rates in the first-year of unemployment insurance, which do not suffer from this potential endogeneity problem and when concentrating on central age groups.

learning'), can make it possible to cope with reallocation demands without burdening workers with an unfair share of the cost of transition. Overall, stronger competitive pressures tend to shift the balance of the two institutions in favor of mobility-friendly unemployment benefits, while employment protection is ill-suited to accommodate new demands for mobility. Unemployment benefits are also preferable to EPL on the grounds that they allow workers to seek for jobs which are hard to get because they require more specialized skills (Acemoglu and Shimer, 1998).

*Thus, a first “political feasibility theorem” which is inspired by the above remains is that reforms of employment protection need to trade labor market flexibility with state-provided unemployment insurance. The trade-off is likely to become more favorable when educational attainments of the workforce are higher and when capital markets are deeper. Both developments tend to reduce the demand of EPL per any given level of unemployment insurance.*

Many European countries would seem to have followed this trajectory, according to the FRDB database: just to mention countries which had the strictest EPL provisions to start with, in Portugal a combination of reforms reducing strictness of employment protection and increasing the generosity of unemployment benefits in the following two years has occurred seven times, in Italy five times.

## **B. Unbundling**

Many institutional reforms are asymmetric in that they change regulations only for a subset of the population. Reforms of EPL, in particular, have often been parametric, involving only specific segments of the workforce. Unbundling reforms is therefore a viable strategy to implement politically difficult reforms. The task is first to identify those groups which are more prone to accept the reforms and then differentiate changes in regulations according to these asymmetries in political preferences. As it is undesirable for equity and also efficiency reasons (Blanchard and Philippon, 2002; Bentolila and Dolado, 1993) to create long-lasting differences in the way different socio-economic groups are treated, it is also important to devise ways to gradually extend the reform to everybody.

Two fields where this approach has been successfully implemented are employment protection legislation and pension reforms, where preferences over reform options are deeply shaped by individuals' characteristics.

Political support to reforms of EPL for different socio-economic groups can be well characterized on the basis of a survey carried out by Fondazione Rodolfo De Benedetti in April 2002 on a representative sample of Italians (1,000 individuals aged 16 to 80). All respondents were asked whether they preferred a flexible “labor market regime in which it is relatively easy to find a job, but it is likewise easy to lose a job” or a rigid labor market in which jobs are difficult to find but last longer. As discussed in Boeri, Galasso and Conde-Ruiz (2003), being aged more than 55 yields a 20 percent higher probability (than the baseline) to vote in favor of employment protection. Low educational attainments also play in favor of stronger employment protection (+12 percent) and even more so when interacted with the fact of having lost a job (+40 percent). Finally residence in depressed labor markets

(e.g., in the Mezzogiorno) also increases support to employment protection. Thus, reforms of EPL are more likely to win support if concentrated on some socio-economics groups, such as high-skill types, the youngsters and those living in relatively dynamic labor markets.

Political support to pension reforms likewise interacts meaningfully with personal characteristics. This can be once more better appreciated with the help of survey data on preferences of German and Italian citizens (Boeri, Boersch-Supan and Tabellini, 2001). These surveys suggest that individual features such as age, income, and education play an important role in shaping the evaluation of these reform options. In particular, the younger, more educated, richer, males tend to approve more reforms shrinking the size of pay-as-you-go systems, while the fact of being member of a trade union, living in poor regions or having a left-wing ideology plays in the opposite direction.

Clearly not all of these heterogeneities in preferences can be exploited in devising feasible reform trajectories. For instance, there are constitutional rules or simply just ethical considerations preventing from enforcing reforms which create long-lasting asymmetries across workers with different educational attainment, let alone their ideology. Other asymmetries can instead be exploited: many pension reforms in Europe (e.g., the Italian 1995 reform, the Swedish 1998 reform) involved only the youngest workers leaving the rules unaltered for the older workers. The reason for creating these two-tier systems is essentially political: younger workers are more favorable to pension reforms reducing the state monopoly in retirement provision and expanding the scope of supplementary, private pensions (see Figure 7 below also drawn from the FRDB survey which was mentioned above).

A similar approach underlines the introduction of flexible contractual arrangements limited to the new hires or to the school-leavers (as in the case of the contracts combing fixed-term durations and a training component). In principle, these reforms eventually change the rules for everybody. As young workers age, all pensions will be paid according to the new rules; as labor turnover changes the stock of jobs only the new contracts are enforced. The crucial issue is the length of the transition from one system to another: a too long transition exposes a country to the risk of getting caught into an equilibrium with a two-tier regime (St-Paul, 2000) in place. In this respect the Swedish pension reform was much better than the Italian one. The former spared only 10 percent of the workers from the new (less generous rules) while in Italy the new DC rules were introduced on a flow, pro-rata, base for no more than 60 percent of the eligible population. Only in 2065 the transition to the new system will be complete.

*Summarizing, reforms “at the margin” or the unbundling of reforms offer a very powerful way to enforce politically difficult reforms. The trick is to devise them in such a way as to gradually extend the new rules to everybody. There are indeed potential distortions associated with maintaining for a long time a two-tier system in place: the speed of the transition from the old to the new rules is therefore crucial in this reform strategy.*

### C. An “Impossibility Theorem”: Reform at the Margin and the Product Market

The previous section showed that governments can exploit the asymmetric impact of the labor market reforms across individuals within the working age population and the heterogeneity in preferences over public policies resulting from these asymmetries.

Unfortunately this reform strategy does not seem to be viable in case of product markets. A marginal reform (similar to those applied in the labor market) in a specific sector (e.g. in the provision of a public utility) would result in a market with different set of rules applied to different firms. On the one hand, incumbent firms would operate under the traditional set of protection and rents (i.e., government subsidies). On the other hand, new entrants would be forced to operate without these rents. This cannot work as the incumbent firm (a former monopolist) would easily drive away from the market the new competitive fringe.

The above suggests a fundamental difference between product market and labor market reforms. In the latter case, marginal reforms are politically feasible and widespread. In the former case, reforms need necessarily to be more fundamental, and need to completely change the set of rules which govern the competitive structure. Thus, the result in Section II should not come as a surprise: in the product market we observe more radical reforms than in the labor market. Only *radical* reforms are indeed likely to have a long-lasting impact on the functioning of the product market. Marginal reform in the product market are just not sustainable.

Lacking the possibility of engineering marginal reforms, radical reforms in a specific industry turns out to be politically very difficult, for at least two reasons. First, the lobbying power of existing incumbents is strong. Aware of the risk of radical reforms, existing monopolists are likely to oppose by all means any radical reform proposal. Some form of rent splitting is likely to take place in this dimension. The second reason is more subtle, and has to do with the marginal propensity to push and resist reform by the active population. Arguably, the mass of voters within the population would certainly have the *aggregate* political power to enforce a radical reform in a specific good sector. The issue is whether such political power is exploited in equilibrium. As noted by several observers in the past, each individual tends to see his/her position in the economic system more as worker rather than as consumer. This asymmetry has an obvious impact on the reform process. While individuals are willing to demonstrate and oppose structural reforms in the labor market, the same political energy seems to be absent when lobbying for radical reforms in the product market. Within the European history of the last 10 years, there is plenty of examples of long lasting strikes aimed at opposing structural reforms of the European welfare states (e.g., Italy, 1994 and 2002; France, 1995). Conversely, the same people have not engaged into long strikes aimed at implementing market reform for specific industries.

*The above may also contribute to explain why there seems to be a stronger status quo bias in product markets than in labor markets. In the product markets reforms unavoidably hit the incumbents, while in labor markets it is possible to concentrate regulatory changes on new entrants. Marginal reforms are a powerful factor of convergence in institutions as they are more successful in the countries which need more deregulation of*

*labor markets: temporary contracts picked up just in the countries where the rules for incumbents were most restrictive.*

#### **D. Delegating Power to Supranational Authorities**

If marginal reforms are feasible in labor markets, while they are not in product markets, there is another reform strategy which is more feasible in product than in labor markets. This is the possibility to delegate power to supranational authorities in order to achieve reforms while being able to shift the blame on someone else. It is the “Ulysses and the Syrens” approach which, after all, was used in the case of monetary policy in the EMU under the idea that a central bank located sufficiently far from political pressures would be better placed to fight inflation.

This strategy is ultimately what lies behind the success of European countries in liberalizing their product markets in the early 1990s. EU Trade and Competition policy in terms of reduction of trade barriers with respect of third countries, elimination of anti-competitive agreements, liberalization of monopolistic sectors, control of mergers between firms and monitoring of state aid, has been very important in liberalizing product markets and in preventing the undoing of earlier reforms.

This involvement of supra-national authorities is not a viable reform strategy in the case of labor market reforms. The issue is that there ought to be sound economic arguments for having in this area supranational authorities in charge of policies. In the case of product markets, the externalities involved by greater competition are self-evident. In the case of labor market and social policies, the case is instead strong for keeping decentralized, country-level, decision-making in place. Public insurance schemes, for instance, can be better run at a decentralized level. There is also evidence of diseconomies scale in social security provisions as the most effective social security systems (those achieving more redistribution relative to the resources allocated to them) in Europe are those of the smallest EU Members. Finally, there are country-specific clusters of institutions and imposing the same approach to all may end up getting the worse of the various systems. It is much better to rely on competition among systems, forcing reforms which imitate the best practices.

Unsurprisingly, attempts to shift responsibility onto someone else, sufficiently far from domestic pressures, in the case of labor market of pension reforms (e.g., the so-called “Maastricht for pensions” proposed under the Italian Presidency of the EU) so far have been unsuccessful.

Overall, shifting responsibilities to supra-national authorities is a viable strategy if there is a strong case for delegating power to higher levels of decision-making. Arguments based on the theory of fiscal federalism (Oates, 1984 and 2000) suggest that this case is strong in product markets, while it is not in labor markets.

#### **V. FINAL REMARKS**

A close scrutiny of European reform efforts over the last 20 years in product- and labor markets highlights two main stylized facts. First, reforms of labor markets tend to occur

at higher frequencies than in product markets. Second, product market reforms are more coherent and consistent, with regulatory change reforms almost always increasing competition. In the labor market, conversely, there are many small regulatory changes, not often mutually inconsistent.

Simple economic theory highlights important spillovers between product- and labor-market reforms. Notably, an acceleration in the former is likely to spur reforms in the latter. Yet, both reforms are politically difficult to implement, since the incumbent firms and employed workers are likely suffer in the short run. Thus, any successful reform strategy should take into account the political constraints and envisage political feasible strategies.

In terms of the political feasibility of different reforms, the paper suggests four lessons. The first two highlight politically feasible ways to implement labor market reforms. The third and fourth lessons are more specific to the product market.

First, labor market reforms should exploit the existence of institutional trade-offs. Notably, reforms of employment protection need to trade labor market flexibility with state-provided unemployment insurance.

Second, marginal reforms in the labor market can help to implement politically difficult reforms. The idea is to devise reforms that apply initially only to new entrants in the market, without affecting the set of regulations applied to existing workers. While there are obvious costs of having a two-tier regime in the labor market, they should remain temporary if reforms are devised such that the new rules will over time extend to every body. The timing of the transition from the old to the new rules is therefore crucial in this context.

Third, marginal reforms are unfeasible in the product market, and only radical reforms can be viable and sustainable. Intuitively, marginal reforms in the product markets are bound to fail, since incumbent and protected firms can easily drive away new entrants.

Fourth, shifting responsibilities to supranational authorities is a viable strategy only in the product market. Arguments based on the theory of fiscal federalism provide a strong case for delegating power to supranational authority in the product market, while well functioning labor market institutions can be better managed at a decentralized level.

Table 1. Labor Market Reforms: 1985–2003

	Decreasing Protection and Generosity, Increasing Rewards from Participation			Increasing Protection and Generosity, Decreasing Rewards from Participation			Total per row	Of which: decreasing (in percent)
	1985–90	1991–96	1997–2002	1985–90	1991–96	1997–2002		
Employment Protection								
Legislation								
Marginal	6	11	34	6	7	36	101	51.0
Radical		5	1	0	2	2	10	60.0
Non-Employment Benefits								
Marginal	9	34	92	10	9	27	181	75.0
Radical	1	4	1	0	0	0	6	100.0
Public Pensions								
Marginal	10	10	22	13	27	24	106	39.0
Radical	1	0	0	1	5	3	10	10.0
Total per column	28	64	150	30	51	92	414	

Source: Fondazione Rodolfo De Benedetti

Table 2. Reforms of Labor Markets and the Macroeconomic Environment

	Politically Difficult Reforms GDP Growth <sup>1</sup>				Politically Popular Reforms GDP Growth <sup>1</sup>			
	Negative	Stagnant	Slow	Strong	Negative	Stagnant	Slow	Strong
Employment Protection								
Legislation								
Marginal	1	-	9	51	-	1	4	52
Radical	-	1	-	6	2	-	-	2
Non-Employment Benefits								
Marginal	6	3	25	109	-	-	5	54
Radical	-	1	1	4	-	-	-	4
Pensions								
Marginal	4	3	10	47	4	-	8	30
Radical	1	1	1	7	-	-	-	1
Total Labor market	12	9	45	224	6	1	17	143
	(0.86)	(0.60)	(0.32)	(0.69)	(0.67)	(1.00)	(0.28)	(0.47)

Note: In brackets, average number of reforms per year and country

<sup>1</sup>GDP growth: Stagnant implies  $0 < g < 1$ ; Slow implies  $1 < g < 2$ ; and Strong implies  $g > 2$ .

Table 3. "Reforms" of Product Market Regulations (1985-98, European Union)

	1985-1990	1991-1996	1997-1998	1985-1990	1991-1996	1997-1998	1997-1998	1997-1998	Total per row	Of which decreasing (in percent)
Airlines										
Marginal	--	5	13	--	--	--	--	--	18	100.00
Radical	3	9	--	--	--	--	--	--	12	100.00
Telecom										
Marginal	4	45	9	--	--	--	--	--	58	100.00
Radical	--	4	8	--	--	--	--	--	12	100.00
Electricity										
Marginal	1	4	3	--	--	1	1	1	9	88.89
Radical	1	3	2	--	--	--	--	--	6	100.00
Gas										
Marginal	--	8	--	--	--	1	1	1	9	88/89
Radical	1	1	--	--	--	1	1	1	3	66.67
Post										
Marginal	6	5	2	1	--	--	--	--	14	92.86
Radical	3	3	--	--	--	--	--	--	6	100.00
Railways										
Marginal	--	--	--	--	--	--	--	--	--	--
Radical	--	5	--	--	--	--	--	--	5	100.00
Road										
Marginal	11	--	1	--	--	--	--	--	12	100.00
Radical	4	1	1	--	--	--	--	--	6	100.00
Total	34	93	39	1	--	3	1.5	170	97.65	
Average per year	5.7	16.3	19.5	0.2	--	1.5	12.14			

Table 4. Reforms of Product Markets and the Macroeconomic Environment

	Politically Difficult Reforms				Politically Popular Reforms			
	GDP Growth <sup>1</sup>				GDP Growth <sup>1</sup>			
	Negative	Stagnant	Slow	Strong	Negative	Stagnant	Slow	Strong
Airways								
Marginal	1	2	2	14	--	--	--	--
Radical	6	1	-	10	--	--	--	--
TLC								
Marginal	9	3	15	46	--	--	--	6
Radical	-	1	1	13	--	--	--	--
Electricity								
Marginal	2	--	--	12	--	--	1	--
Radical	--	1	2	4	--	--	--	--
Gas								
Marginal	1	1	1	6	--	--	--	--
Radical	--	1	--	5	--	--	--	--
Post								
Marginal	--	--	1	12	1	--	--	1
Radical	2	--	1	6	--	--	--	0
Railways								
Marginal	--	--	--	--	--	--	--	--
Radical	--	--	1	6	--	--	--	--
Road								
Marginal	1	--	--	12	--	--	--	--
Radical	--	1	1	7	--	--	--	--
Total Labor market	22 (0.40)	10 (0.42)	25 (0.31)	153 (0.58)	1 (1)	0 --	1 (1)	7 (0.58)

Note: In brackets, average number of reforms per year and country

<sup>1</sup>/GDP growth: Stagnant implies  $0 < g < 1$ ; Slow implies  $1 < g < 2$ ; and Strong implies  $g > 2$ .

**Figure 1. Correlation Between Product- and Labor Market Indicators (OECD Countries, 1998)**

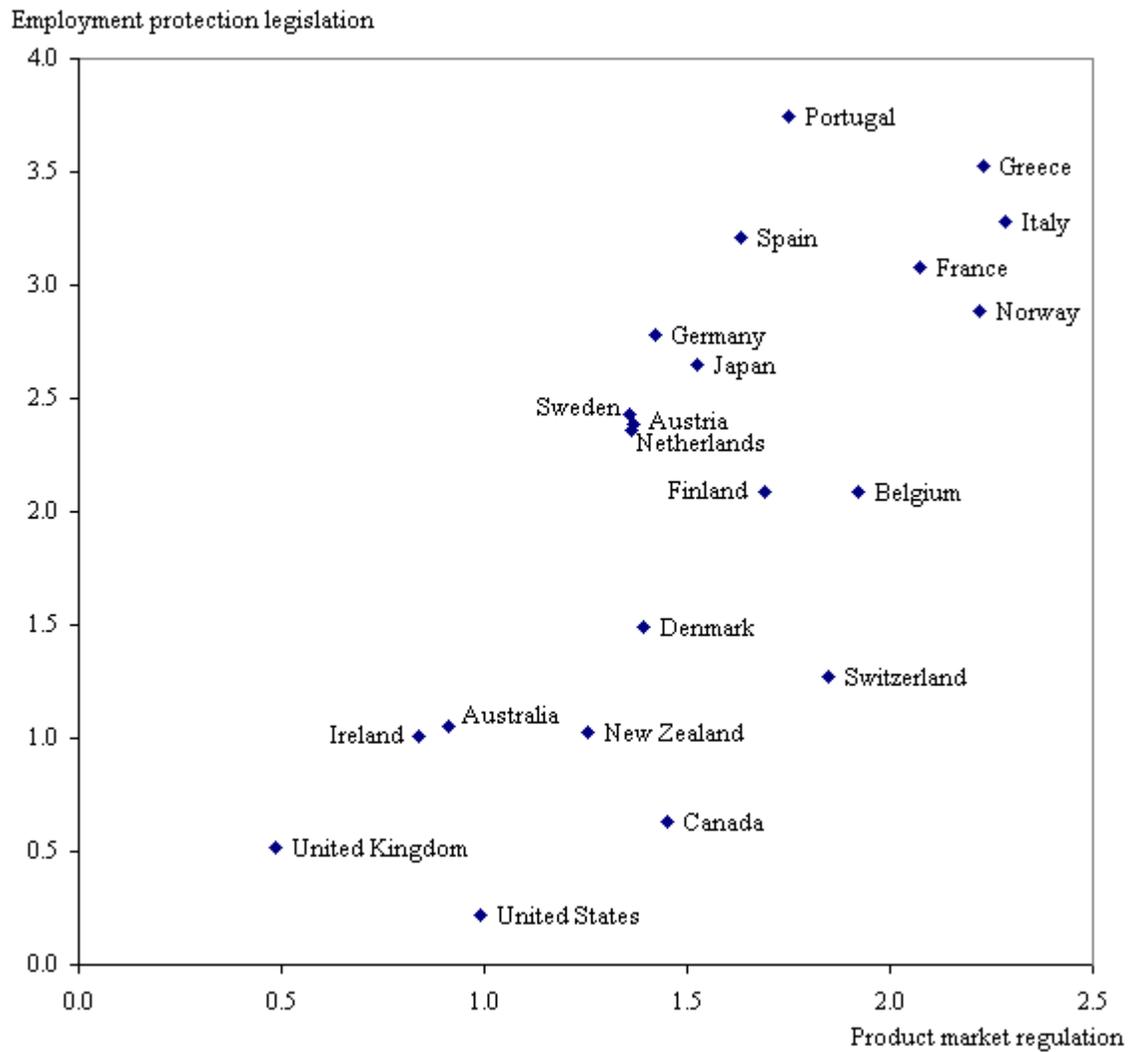


Figure 2: Convergence and Divergence in Reform Efforts

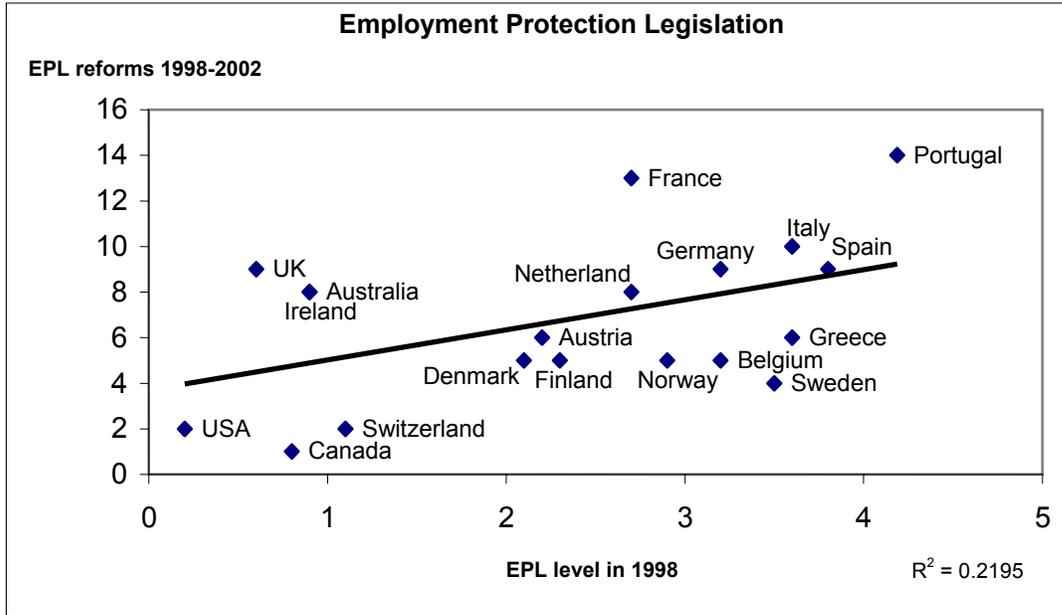


Figure 3: Evolution of the Indicators of Employment Protection (late 1980s and late 1990s)

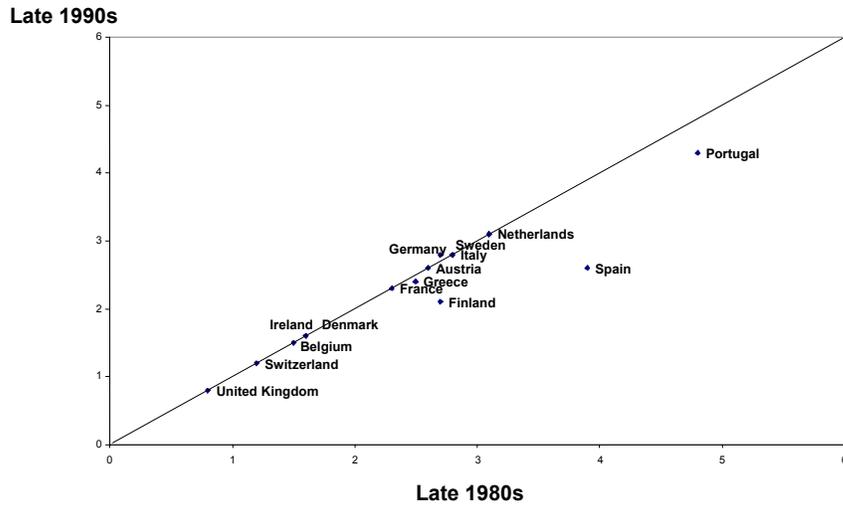


Figure 4: Ratio of Customs and Import Duties to the Value of Imports (EU Countries)

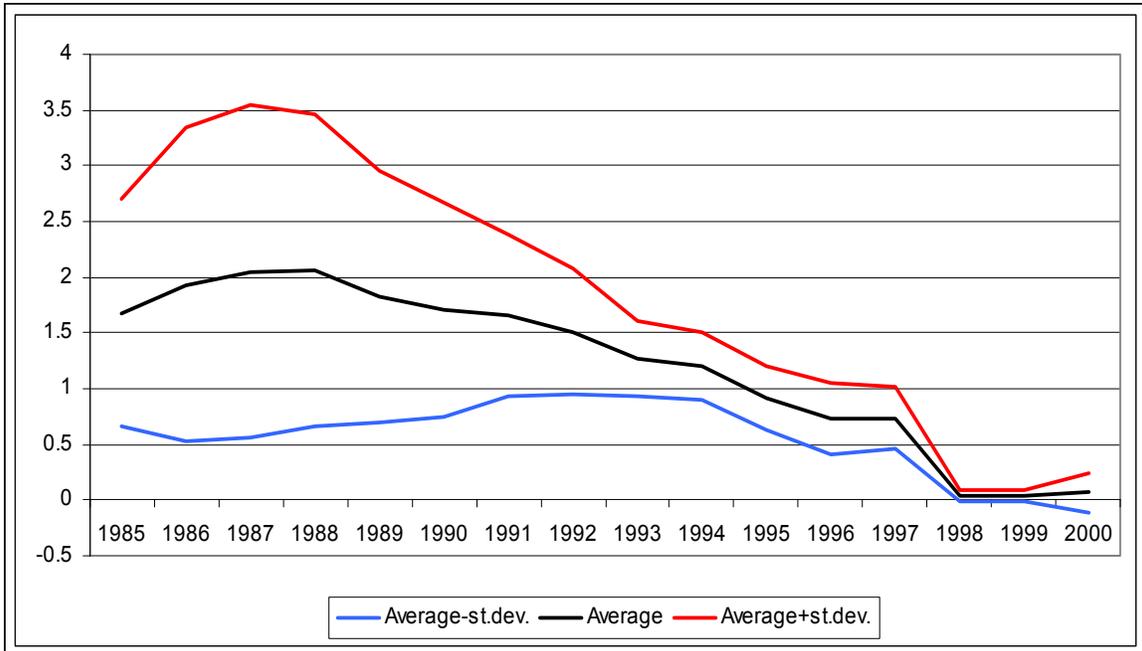
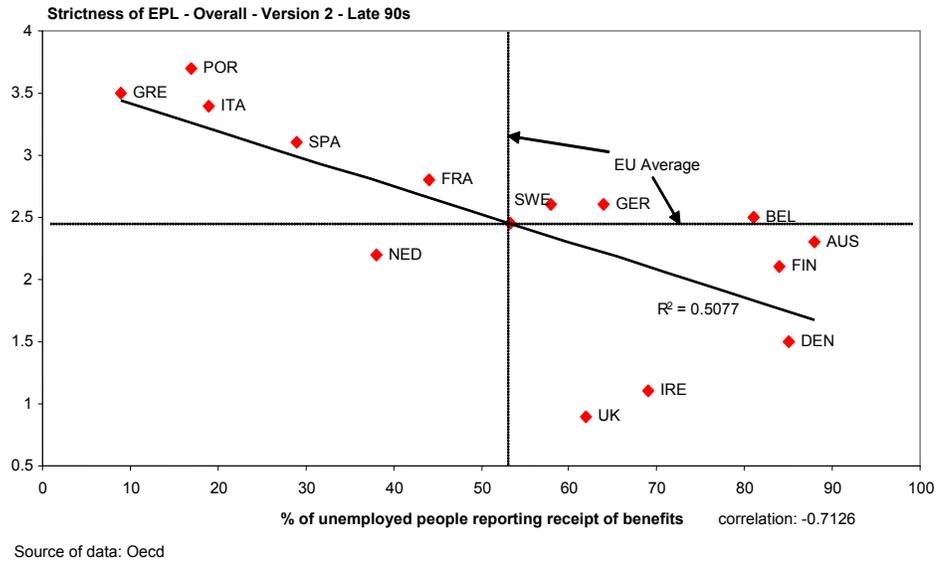
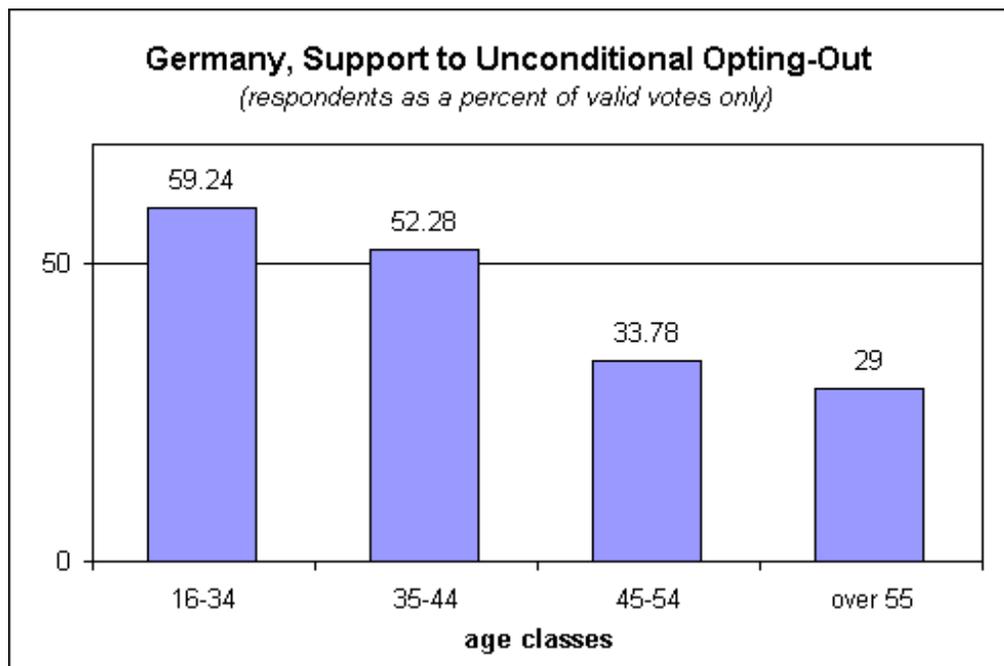
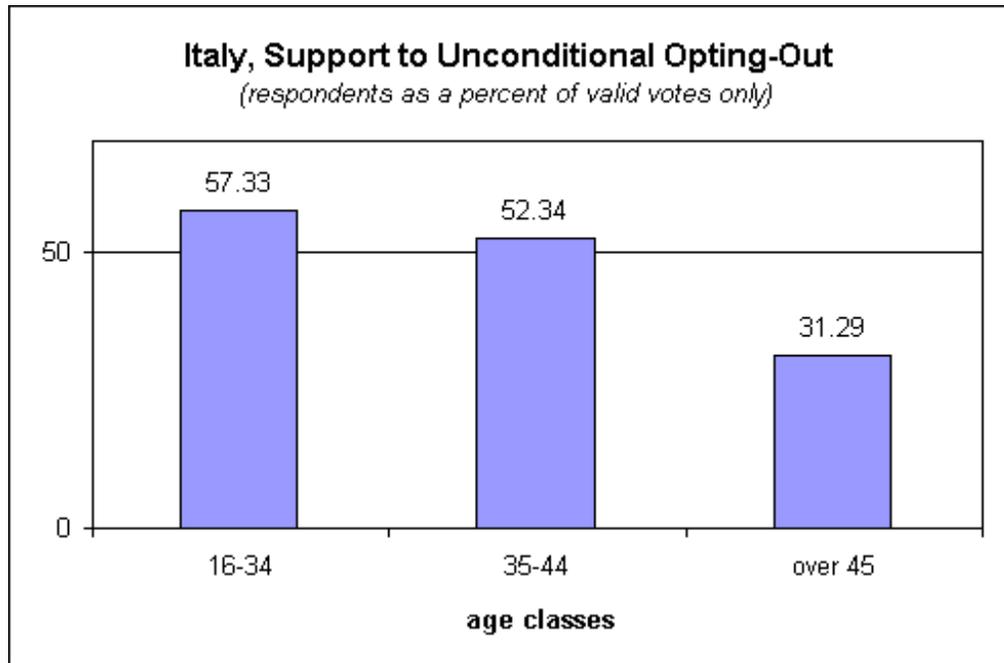


Figure 5: The UB/EPL Tradeoff



**Figure 6: Public Support to Pension Reforms by Age Groups**



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