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## **Employment protection legislation: a *critical* review of the literature**

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# Employment protection legislation: a *critical* review of the literature

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## **1. INTRODUCTION**

After nearly thirty years since unemployment rates started to rise massively, and despite the recent improvements, the labour market performances of many European countries are still not satisfactory. This situation is in stark contrast with what has been happening in other countries, and especially in the US, where there have been remarkable fluctuations in unemployment rates, but no long term trend, so that today's levels are similar to those of the sixties. In the European Union (EU) unemployment rates are still too high, and this is mainly due to its large long-term component. Indeed, the proportion of people who have been without job for less than twelve months is instead roughly the same across the two sides of the Atlantic Ocean, and is about 5 per cent of the labour force. Moreover, European employment and labour force participation rates are lower than those registered in the American labour market, with the first being just over 60 per cent (against nearly 74 per cent in the US), and the second barely exceeding 67 per cent (compared with more than 77 per cent in the US).

The seriousness of the situation has considerably stimulated theoretical and empirical research, in an effort to give an explanation of such phenomena, and therefore suggest possible remedies to policy makers. The most commonly proposed interpretation of the European Unemployment problem takes into consideration both the role of macroeconomic shocks and that of the different labour market institutions (wage setting mechanisms, employment protection legislation, unemployment benefits, taxation system, active labour market policies)<sup>1</sup>. In fact, it is generally thought that while the adverse supply and demand shocks that occurred during the last thirty years have been directly responsible for the rise in unemployment, this was subsequently only partly reabsorbed during the periods of expansion because of the nature of the existing labour market regulations. It is therefore on these latter that economists have concentrated their attention. This area of research has been fruitful in many ways, leading to a much better understanding of how labour markets work<sup>2</sup>. In particular, it has highlighted some of the potential costs and benefits associated with each of the labour market institutions listed previously.

In this extended essay I will concentrate my attention on the role played by Employment Protection Legislation (EPL), which is probably the most controversial institution, since it gives rise, as we will see, to trade-offs which are very difficult to appraise.

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<sup>1</sup> For a summary of the debate see Blanchard (2000).

<sup>2</sup> A very useful review of this literature is contained in Blau and Kahn (1999).

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In particular, in the next section I will briefly describe the types of regulations of the labour market found in OECD countries. Then I will present a review of the main conclusions economists have reached on the likely effects of EPL on labour market performance, while in the fourth part I will offer a presentation of the reasons why some limits to the right of the employers to decide the amount of labour to be used in the production process might be desirable. Finally, in the last section I will try to point out the limits that in my opinion still exist in the current understanding of the effects of EPL on the labour market equilibrium, and to suggest possible areas where the future research could concentrate its attention, in order to identify how an *optimal* degree of flexibility might be obtained.

### **2. WHAT IS EPL**

With the acronym EPL economists refer to the entire set of regulations that place some limits to the faculties of firms to hire and fire workers, even if they are not grounded primarily in the law, but originate from the collective bargaining of the social partners, or are a consequence of court rulings. In particular, provisions favouring the employment of disadvantaged groups in society, determining the conditions for the use of temporary or fixed-term contracts, or imposing training requirements on the firm, affect hiring policies, while redundancy procedures, mandated pre-notification periods and severance payments, special requirements for collective dismissals and short-time work schemes influence firing decisions. The nature of these restrictions on the firms' freedom to adjust the labour input is quite similar in all OECD countries, but the actual procedural details and the overall degree of stringency implied by them varies considerably. These provisions are enforced through the worker's right to appeal against his lay-off.

Some aspects of these regulations, like the length of advance notices or the dimension of severance payments can be measured with precision. Other important features of EPL, like for example the willingness of labour courts to entertain appeals by fired workers, or how judges interpret the concept of "just cause" for termination, are much more difficult to quantify. A very detailed description of the current situation is contained in the 1999 issue of the OECD *Employment Outlook*<sup>3</sup>. In that report different indexes were computed in order to rank<sup>4</sup> countries according to the degree of stringency of their rules regarding individual

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<sup>3</sup> See OECD (1999), Chap. 2 Section I B, p. 54-68 and Annex 2.A p. 90-114.

<sup>4</sup> These rankings are indeed unambiguous. In fact, EPL indicators tend to be positively correlated among them, as has been shown for example by Bertola (1990). This is sufficient so that the rankings based only on the measurable components of EPL reflect the true cross-country situation.

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firings, collective dismissals and the use of atypical labour contracts. They are summarised in Table 1. Lower values indicate less pervasive disciplines of the labour market. As it can be seen, the least regulated countries are the US and UK, while the most burdensome constraints are found in Southern European countries.

**Table 1: EPL stringency Indexes .**

	Individual firings	Collective dismissals	Temporary Employment Regulation	Overall strictness Index
<b>Central and Western Europe</b>				
Austria	2.6	3.3	1.8	2.3 (11)
Belgium	1.5	4.1	2.8	2.5 (12)
France	2.3	2.1	3.6	2.8 (16)
Germany	2.8	3.1	2.3	2.6 (15)
Ireland	1.6	2.1	0.3	1.1 (4)
Netherlands	3.1	2.8	1.2	2.2 (9)
Switzerland	1.2	3.9	0.9	1.5 (6)
United Kingdom	0.8	2.9	0.3	0.9 (2)
<b>Southern Europe</b>				
Greece	2.4	3.3	4.8	3.5 (19)
Italy	2.8	4.1	3.8	3.4 (18)
Portugal	4.3	3.6	3.0	3.7 (21)
<b>Table 1 (continued)</b>				
Spain	2.6	3.1	3.5	3.1 (17)
Turkey	2.6	2.4	4.9	3.5 (20)
<b>Nordic Countries</b>				
Denmark	1.6	3.1	0.9	1.5 (7)
Finland	2.1	2.4	1.9	2.1 (8)
Norway	2.4	2.8	2.8	2.6 (14)
Sweden	2.8	4.5	1.6	2.6 (13)
<b>North America</b>				
Canada	0.9	3.4	0.3	1.1 (3)
US	0.2	2.9	0.3	0.7 (1)
<b>Asia and Oceania</b>				
Japan	2.7	1.5	...	2.3 (10)
Australia	1.0	2.6	0.9	1.2 (5)

Source: OECD (1999).

Note: the number in parentheses in the fourth column indicates the ranking of countries according to the degree of strictness of their EPL. 1 refers to the most flexible labour market, 21 the most regulated.

### **3. EPL AND LABOUR MARKET PERFORMANCE**

In the past decade, considerable efforts have been made in order to understand how EPL affects the characteristics of the labour market equilibrium, and how it influences the way the economy absorbs exogenous shocks. In particular, economists have tried to understand the consequences of stringent EPL provisions on the employment and unemployment levels, dynamics over time and composition, and on the profits of the firms. These results will now be described<sup>5</sup>.

#### *a) Employment and Unemployment levels*

From a theoretical perspective, there are no compelling reasons for strict EPL to reduce average employment levels and increase average unemployment. In fact, models like those of Bentolila and Bertola (1990) and Bertola (1990 and 1992), that have a multi period setting and take explicitly into consideration the uncertainty faced by firms as regards to their future labour needs<sup>6</sup>, highlight the existence of two opposing effects on employment and unemployment generated by hiring and firing restrictions. On the one hand, assuming that the cyclical wage pattern is not affected by mandated firing costs, EPL reduces the propensity to hire by employers, since they fear that such decisions will be difficult to reverse in the future, in case of a recession. On the other hand, EPL also leads firms during downswings to keep more workers employed, than they would have otherwise done. Therefore, EPL reduces both job creation and job destruction, so that the net effects on average employment and unemployment are not identifiable *a priori*. Indeed, the final result depends on very subtle features of the actual model being used, like the functional form of the labour demand schedule, the assumptions made on the process governing labour demand fluctuations, the size of the employer's discount rate, and that of the economy's attrition rate. These two mechanisms could in principle compensate each other, so as to leave the average employment and unemployment levels unchanged from a *laissez-faire* situation. What is instead sure, is that more stringent EPL lowers the fluctuations in the quantity of labour demanded over the business cycle, leading to smoother dynamic patterns of those aggregates.

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<sup>5</sup> This literature has been recently reviewed in Bertola (1999).

<sup>6</sup> Because of exogenous shocks that are assumed to have a positive probability.

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Empirical research has also been conducted on these issues<sup>7</sup>, and overall seems to give support to the theoretical insights discussed above. In fact, aggregate employment and unemployment are not in general significantly affected by indicators of EPL stringency, and even when this is not the case the coefficients in the regressions are always small<sup>8</sup>. Instead, strict EPL gives incentives to the firms to resort to other sources of flexibility like overtime, which, as shown by Abraham and Houseman (1994), indeed tends to be used much more in Continental European countries, where the variability of hours per worker is significantly higher than in the Anglo-Saxon labour markets.

### *b) Employment and Unemployment Dynamics and Composition*

Employment and unemployment dynamics can be understood analysing the data on the flows in the labour market. The two most important indicators are the *labour turnover rate* (i.e. the sum of total new hirings and separations, divided by the level of employment measured at the beginning of the period examined) and the *job turnover rate* (i.e. the total sum of job gains and job losses registered at the firm or establishment level, divided by the employment level at the beginning of the period). Some recent measures of these summary indexes, and of some of their basic components, are given in Tables 2 and 4. Moreover, Table 3 gives some information on the tenure length distribution of existing jobs.

**Table 2: Labour Turnover Rate and Long Term Unemployment.**

	<b>Unit of observation<sup>1</sup></b>	<b>Sampling Period</b>	<b>Labour turnover rate</b>	<b>Long term unemployment<sup>2</sup></b>
<i>Denmark</i>	E	1984-1991	57.9	28.7
<b>Finland</b>	E	1986-1988	77	27.5
<b>France</b>	E	1990-1991	58	44.1
<b>Germany</b>	E	1985-1990	62	52.2
<b>Italy</b>	F	1985-1991	68.1	66.7
<b>Netherlands</b>	F	1988-1990	22	47.9
<b>Canada</b>	F	1987-1988	92.6	10.1
<b>US</b>	E	1979-1983	126.4	8

Source: Bertola *et al.* (1999).

<sup>7</sup> For a summary on the empirical literature on EPL see OECD (1999), Annex 2.C., p.119-125.

<sup>8</sup> See in particular Scarpetta (1996), Jackman *et al.*(1996), Blanchard (1998). Nickell (1997) and Nickell and Layard (1999) find instead a negative effect of EPL on the Employment rate, which disappears when only prime-age men are considered. As the authors explain, this is due to the high correlation between strict EPL and low female participation in Southern European countries. An important exception is nevertheless contained in a work by Lazear of 1990, according to which high severance payments reduce employment and labour force participation quite a lot, while at the same time rising unemployment.

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Notes: 1) E=establishments, F=firms;

2) Data 1999. As percentage of total unemployment.

**Table 3: Tenure length distribution of existing jobs.**

	< 1 year	> 10 years	Average, all jobs
<i>France</i>	15	42	10.7
<b>Germany</b>	16.1	35.4	9.7
<b>Italy</b>	8.5	45.6	11.6
<b>UK</b>	19.6	26.7	7.8
<b>Canada</b>	23.5	N/A	7.8
<b>US</b>	28.8	N/A	6.7

Source: Bertola *et al.* (1999).

**Table 4: Job Gains, Job Losses and Job Turnover as a per cent of total employment.**

	Canada 1983-91	France 1984-91	<i>German</i> <i>y</i> 1983-90	Italy 1987- 92	UK 1985-91	US 1984-91	US 1984-88 <sup>1</sup>
<b>Gross job gains</b>	14.5	12.7	9.0	11.0	8.7	13.0	8.2
<b>Openings</b>	3.2	6.1	2.5	3.8	2.7	8.4	1.4
<b>Expansions</b>	11.2	6.6	6.5	7.3	6.0	4.6	6.7
<b>Gross job losses</b>	11.9	11.8	7.5	10.0	6.6	10.4	10.4
<b>Closures</b>	3.1	5.5	1.9	3.8	3.9	7.3	2.7
<b>Contractions</b>	8.8	6.3	5.6	6.2	2.7	3.1	7.7
<b>Net employment change</b>	2.6	0.9	1.5	1.0	2.1	2.6	-2.2
<b>Job turnover</b>	26.3	24.4	16.5	21.0	15.3	23.4	18.6
<b>Continuing establishments only</b>	20.0	12.9	12.1	13.5	8.7	7.7	14.4

Source: Bertola *et al.* (1999).

Note; 1) only manufacturing.

As it can be seen from Table 2, countries with low EPL like the US and Canada show a labour turnover rate nearly twice as big as that of most of the European countries which are

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characterised by much more pervasive labour protection regulations<sup>9</sup>. This means that job loss probabilities and unemployment outflows tend to be negatively correlated with EPL. This is in turn reflected in the longer average duration of unemployment spells and the larger proportion of long term unemployment over the total. Further confirmation of the stabilising effects of EPL is given by the figures on the tenure length distribution of existing jobs, given in Table 3. This empirical evidence gives support to the theories according to which EPL leads to a segmentation in the labour market between the so-called *insiders*, the workers with a protected job, and the *outsiders*, who are people that are either unemployed or employed with fixed-term, part-time or temporary contracts, or even in the black economy<sup>10</sup>, and face big difficulties to find a job covered by EPL because of the firms' reduced propensity to hire. This latter group is mainly constituted by youths, women, racial minorities and unskilled workers.

What has to be emphasised though, is that EPL only creates the necessary conditions for the existence of such a contraposition. What is in fact also needed is wage inflexibility, that prevents *outsiders* to underbid *insiders*, so as to “buy” themselves a job. This is exactly what happens in the most regulated labour markets thanks to non-competitive wage setting institutions, that impose either minimum wages, or administrative extension to all the workforce of contracts signed by sector-level unions dominated by *insiders*, which make it illegal for firms to employ workers at wages lower than the agreed level. Indeed, without wage rigidities EPL provisions would never be binding, since firms could lower wages to a point where workers would quit voluntarily. Both wage and quantity rigidities can also explain unemployment persistence at the macroeconomic level. In fact they strengthen the bargaining position of *insiders*, whose excessive wage requests can hamper the recovery of employment after an adverse shock has hit the economy. This source of hysteresis is also reinforced by other factors like the loss of human capital suffered by people who have been without a job for a long period of time.

The evidence on *job turnover rates*, could instead be at first sight surprising. In fact, as it was discussed in point a), EPL should reduce both hiring and firing, and therefore job turnover, but the numbers in Table 4 imply a very small correlation between those two variables. For example in Italy and France job turnover is high, and very similar to the level of the US or Canada, with more than one every five jobs either created or destroyed every

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<sup>9</sup> See Table 1 p. 3-4.

<sup>10</sup> Often economists refer to these jobs as constituting the “secondary” or the “marginal” sector of the labour market.

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year. This can be rationalised in different ways. First of all, one could be sceptical all together, and say that because of differences across countries in the frequency of observations and in sector and firm composition of the samples, those comparisons are actually meaningless. But probably the most interesting insights are found in the works that try to give economic reasons to such patterns. In this respect two recent papers have addressed the issue. The first, by Bertola and Rogerson<sup>11</sup>, looks at the interactions between wage and quantity rigidities, and highlights the possibility that with excessive wage compression the negative impact of EPL on hirings and firings can be completely offset. The second contribution is instead from Boeri<sup>12</sup>. His intuition is that strict EPL leads to the formation in the labour market of a secondary sector that offers temporary and unstable employment opportunities, where workers are forced, before they actually lose their current job, to search for a new one. This generates a high level of job-to-job shifts, which accounts for a large proportion of the job turnover, with people changing occupation without even passing through the condition of unemployed<sup>13</sup>. Therefore from these latter considerations it can be understood that high job turnover rates are not always a sign of a very flexible labour market, as it is often believed, but they could simply be another way in which the contraposition *insider-outsider* emerges.

### c) *Firms' profits*

Because of EPL, as we have seen in section a), firms engage themselves in *labour hoarding* practices, which lead them to employ a lower quantity of workers during upswings, while keeping inefficient levels of employment in downturns. For a given level of wages, this loss of productive efficiency would result in lower average profits. On the other hand, if firms operated in a context of efficiency wages of the gift-exchange type<sup>14</sup>, by inducing more stable relationships with the workers and reducing their job and income insecurity, EPL could allow them to pay lower wages, without reducing the effort provided by the labour force employed, with beneficial effects on profits. Thus in principle the effects on profits are ambiguous.

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<sup>11</sup> See Bertola and Rogerson (1997).

<sup>12</sup> See Boeri (1999).

<sup>13</sup> This is not the only result of the model proposed by the author. Indeed, his analytical framework also confirms the fact that EPL makes the unemployment pool more stagnant, since first of all the workers in the marginal sector compete directly with the unemployed, thus reducing their chances of exiting from that condition, and secondly, when they lose their job, that position is cancelled from the firm's organization chart, so that no employment opportunities are left for other *outsiders* who are looking for an occupation.

<sup>14</sup> See Akerlof (1984).

#### **4. JUSTIFICATIONS FOR EPL**

Within a perfect competition framework, where every economic agent is *price-taker*, information is perfect and markets are complete, restrictions like those implied by EPL cannot be rationalised. In fact, the equilibrium reached by the economy would be optimal by definition, and there would be no need for any form of public intervention aimed at changing that outcome. Indeed, only redistributive policies in the form of lump sum taxes and subsidies that change the initial endowments of the different economic agents would have sense in that hypothetical setting.

Of course, real-life markets behave instead much differently, and the existence of original imperfections can cause them to fail in their allocative function. Considering in particular labour markets, the possible shortcomings of the equilibrium generated by *laissez faire* economic interactions could in principle be corrected, or at least limited, by well designed public interventions, involving some degree of EPL. Indeed, this possibility has been studied by several recent contributions, that have highlighted different reasons why that could be the case.

In the context we are examining, the most important limit of free markets, thoroughly analysed by Bertola in a work of 1996, is the fact that they can hardly supply insurance against the risk of becoming or remaining unemployed, while risk adverse workers would instead like to protect themselves against the undesired income fluctuations that such events cause, so as to smooth consumption through time. This is due to the existence of incomplete and asymmetric information that leads to the classical problems of moral hazard and adverse selection. That is, on the one hand, workers would reduce their efforts to avoid unemployment and find new jobs, once they are covered from the consequences of such an event, and on the other hand, workers who know that they face a high risk of being laid off would either make the insurance unprofitable for the company that provides it, or would make the conditions attached to it scarcely attractive for people with average risk. To analyse these problems, Bertola sets a model where firms are subject to random idiosyncratic shocks that affect their labour demand schedules either positively or negatively, and which are independent of the workers' characteristics. The latter are risk adverse, face mobility costs if they are forced to change employer, and have access only to imperfect capital markets. Wages are instead perfectly flexible. In this situation, wages not only compensate the workers for the effort put in the production process, but also have to take into account the risk that

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adverse future evolutions in the firm's profitability might lead to layoffs. The author shows that because of this, in equilibrium the wage differential between what is paid by firms experiencing a fall in the demand of their product, and that offered by firms in good conditions should be higher than what would have been if capital markets would have been able to provide perfect insurance against unemployment. This means that either the wage paid by the "good" firms is higher, or the salary offered by the "bad" ones is lower than what would have happened in the perfect competition case. In both cases there will be a less efficient allocation of labour, since employment will be lower in the firms in good health, and higher in those experiencing difficulties. If some of the workers employed in the latter could be moved to those in the first group, overall production would increase, and so would the flow of dividends. Therefore, also the owners of the firms are damaged by the imperfections in the capital markets. In this environment Bertola shows that EPL in the form of mandatory severance payments could improve the situation, since this tax paid on the firings would reduce the wage differential among the two types of firms considered, therefore cutting the workers' mobility costs. More specifically, the wages in the firms in good conditions would decrease, while those in of the firms in difficulty would rise. This would improve the allocative efficiency of the economy, and allow workers to smooth their consumption over time. It is important to notice that this result is achieved only if the severance payment goes directly in the pockets of the workers involved in the restructuring processes, and is not wasted in legal expenses.

A second justification for EPL has been suggested by Fella in an interesting article of 1996. In it he develops a shirking efficiency wage model in which firms, just like in Bertola's economy described above, are also subject in each period to random idiosyncratic *shocks* that cause fluctuations in their labour demand schedules. In particular, both types of firms set the wages above the market clearing level, so as to induce their workforce to behave correctly, but the variables that influence their salary policies are different. In fact Fella assumes that the firms hit by a downturn cannot be further damaged by another adverse shock in the subsequent time interval, so that the efficiency wage they pay to the workers that keep their job and are not fired depends only on aggregate factors like the amount of unemployment, and the fraction of firms experiencing a boom in the demand of their products. Instead, employers whose business is going well have to pay a higher wage, because the salary also has to compensate the workers for the risk of being sacked in the next period, in the case the economic situation deteriorates. This creates a wage differential between the two groups of

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firms, without which the workforce in the “good” firms would find it optimal to shirk. But this reduces the profits made by these firms, and also leads in aggregate to a higher level of unemployment than the one which would have been generated in the case where the efficiency wage was the same across all the productive units, and depended only on aggregate variables. All this would not happen if it was possible for the employer enjoying a favourable period to commit himself credibly to reduce at the minimum necessary the cutting of jobs in case a future adverse demand shock requires some restructuring. Unfortunately such a promise is time inconsistent, and therefore not credible by rational workers who are maximising the present discounted value of their stream of future incomes. According to Fella’s model, a possible improvement of this equilibrium could be obtained with the introduction of mandatory severance payments given to the laid off workers, as it happened in Bertola’s case. In fact, this would reduce the firm’s propensity to fire in downturns, making credible the commitment previously described, because workers understand that it would be costly for their employers not to do so. In this way highly productive firms can promise to their employees a higher employment during downturns, thus reducing the probability of future layoffs, and enabling them to lower the efficiency wage without causing shirking. Therefore a tax on firing in this case increases employment and consequently total production. This is due to the fact that firms subject to negative shocks fire less, and this effect is not offset by the increase in the now common efficiency wage that has to be paid in both types of firms, since the reduction in aggregate unemployment due to EPL reduces the cost of shirking by the workers. Efficiency also increases because the positive effect on the welfare of the workers and the increase in the profits of the expanding firms are proven to more than compensate the inefficiencies generated by the fact that EPL worsens the allocation of workers among job opportunities, raising employment in the “bad” firms.

A third group of motivations for EPL has been identified within the literature on human capital accumulation. First of all, if general human capital and specific human capital are complementary factors in production, then the expected return on the first is higher the more specific human capital it is expected to be accumulated on the job place. But a high probability of turnover generated by complete freedom of firing reduces the expectations of acquiring enough specific training, possibly leading also to an inefficient reduction in the investment in more general skills. In a competitive environment firms would never take this negative externality into account when deciding their employment policies. Secondly, in the face of high job loss risks, households will be induced to increase the amount of

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precautionary savings, while reducing other expenses, like the amount of resources dedicated to finance their children's education. This is most likely to happen in the poorest households, thus causing an important equity problem. Therefore in both cases EPL, by encouraging more stable working relations, could have a positive effect on the efficiency and equity of the equilibrium reached by the economy.

Finally, in an interesting article of 1990, Aghion and Hermalin have highlighted the possibility that if there is asymmetric information between workers and firms, limitations to their freedom of bargaining could improve the overall efficiency of the economy. In order to explain their intuition, they develop a model where employers are supposed to be risk neutral, while workers are risk adverse. Moreover, the latter have different productivities, and therefore face different degrees of layoff risk, that depend on the intensity of the negative shock suffered by the firm in which they are employed. More productive workers are relatively safer than those with lower abilities. In this framework, each worker can bargain over his most preferred package of wage and severance payment required in the case of redundancy. Workers with lower productivities would normally prefer to give up part of their salary, to obtain a higher compensation in case they were made redundant, so as to be better insured against possible income fluctuations. But things change when the workers' productivity is not perfectly observed by the employer. In fact this allows workers to make themselves more attractive to the employers by giving up high redundancy payments so as to signal high productivity. Because of competition for the available jobs, this situation would lead workers to demand in equilibrium lower severance payments than they would have asked for, had the information been perfect, so that the insurance offered is lower than what would be optimal. Consequently, laws that would fix minimum levels of severance payments could in principle correct this contractual inefficiency.

### **5. ASSESSMENT AND FINAL REMARKS**

As we have seen, theoretical considerations do not lead to definitive results on the identification of the likely impact of EPL on the major labour market aggregates. This is not clarified completely either by empirical research, but in general the variables referring to the degree of stringency of EPL fail to account for a significative proportion of the variation in employment and unemployment rates over time and across countries. Instead, the effects on the dynamics and composition of those aggregates are much clearer: both theoretical analysis

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and empirical research show that EPL has strong effects on labour market flows, reducing the movements in and out of unemployment, because of *labour hoarding*, thus increasing its long term component. This leads to a segmentation of the labour market between workers which are protected by EPL (the so called *insiders*) and those (the *outsiders*), who are unemployed or employed in the secondary sector of the job market, which can either be regulated, offering part-time, fixed-term and temporary employment opportunities, or completely hidden in the black economy.

Unfortunately, as noted for example in the OECD *Employment Outlook* of 1999<sup>15</sup>, deriving from these results some straightforward policy implications for the reform of EPL is not always easy. This probably also explains why overall reforms of EPL have not been attempted with determination in many European countries, even after unemployment rates reached unprecedented high levels, and why instead many governments have decided only to relax the conditions under which firms can gain access to the more flexible labour contracts (fixed term, part-time and temporary work)<sup>16</sup>.

In fact, what is still missing is a model that puts together both the results obtained by the literature that has studied the role of institutions in determining the characteristics of the equilibrium reached in the labour market, and the intuitions developed in the works which have tried to explain why in certain circumstances limits to the right of firms to decide the amount of labour employed could be desirable. Indeed, only in such a unified framework all costs and benefits associated with the different components of EPL, and their interactions with all the other labour market institutions (wage setting mechanisms, unemployment benefits, taxation system, active labour market policies), can be appropriately evaluated and weighted against each other. Such theoretical effort requires much analysis and thought, and could not have been reasonably attempted in this short essay. Nevertheless, in this final section it is possible to indicate some of the steps that would be necessary to undertake in order to hope to reach some useful results, that could possibly enable economists to define an *optimal* degree of flexibility for the labour market. The first one should be to create some new Welfare indexes that take into account both the economy wide performance (basically the growth rate), and the labour market outcomes (in terms of employment rate, unemployment rate, dimension of the flows within labour market states, wage levels and dispersion, just to mention some of the most important), associated with the different EPL provisions and the other labour market institutions. In doing this, for me it is fundamental to

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<sup>15</sup> See OECD (1999) p. 71.

<sup>16</sup> See OECD (1999) Table 2.1 p. 52-53.

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take into consideration Sen's criticism<sup>17</sup> about the statistics currently used to measure labour market performance. In fact, as he noted, they are unable to take fully into account the whole range of costs associated with unemployment, and also low quality employment (for example inequality, loss of freedom and social exclusion, psychological damages, loss of human capital, racial and sex discrimination, loss of social relationships, organisational conservatism)<sup>18</sup>. So, for having a clearer picture of the different problems existing in labour markets, also these measures have to be improved. Once these things have been done, it would then be possible to build a general equilibrium model of the economy, that allowed for all the different effects and interactions associated to EPL and the other labour market institutions, and to estimate how the different combinations of regulations affect the welfare measures constructed. This model would also serve as the basic tool to simulate the effects of possible labour market reforms, so as to understand the strengths and weaknesses of alternative packages. It would also help to highlight their distributional effects. These exercises should also include a dynamic dimension, so that the best timing for the implementation of the different measures contained in each reform package could be analysed. This is very important, because it is not sufficient to understand who will be the final winners and losers in the new equilibrium, after the reform has been implemented. Instead, it is also fundamental to identify the exact costs involved in the transition period, and who would bear them. Only in this way it would be possible to know which reforms are politically feasible, and which would never obtain a majority in Parliaments.

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<sup>17</sup> See Sen (1997).

<sup>18</sup> This is the case even with the alternative unemployment measures which include discouraged workers and involuntary part-time workers, that are sometimes published. See for example OECD (1995).

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### REFERENCES

Abraham K.G., Houseman S.N., “Does Employment Protection Inhibit Labour Market Flexibility? Lessons from Germany, France and Belgium, in Blank R.M. (ed.) *Social Protection versus Economic Flexibility: Is there a trade-off ?*, The University of Chicago Press, (1994);

Aghion P., Hermalin B., “Legal Restrictions on Private Contracts Can Enhance Efficiency”, *Journals of Law, Economics and Organizations*, 6, p. 381-409, (1990);

Akerlof G., *An Economist's Book of Tales*, Cambridge University Press, (1984);

Bentolila S., Bertola G., “Firing costs and Labour Demand: How Bad is Eurosclerosis?”, *Review of Economic Studies*, 57(3), p. 381-402, (1990);

Bertola G. “Job Security, Employment and Wages”, *European Economic Review*, 34, p. 851-866, (1990);

Bertola G. “Labour Turnover Costs and Average Labour Demand”, *Journal of Labour Economics*, 10, p. 389-411, (1992);

Bertola G. “Uninsurable Risk, Efficiency and Labour Market Rigidities”, *mimeo*, (1996);

Bertola G., “Microeconomic perspectives on aggregate labor markets”, in Ashenfelter O., Card D. (eds.) *Handbook of Labor Economics*, volume 3c, chapter 45, (1999);

Bertola G., Boeri T., Cazes S., “Employment Protection and Adjustment: Evolving Institutions and Variable Enforcement in OECD Countries”, *ILO Working Papers* , (1999){downloadable from <http://www.iue.it/Personal/Bertola/Welcome.htm>};

Bertola G., Rogerson R., “Institutions and Labor Reallocation”, *European Economic Review*, 41, p. 1147-72, (1997);

## **Employment protection legislation: a *critical* review of the literature**

Blanchard O., "Thinking about Unemployment", *mimeo*, (1998);

Blanchard O., "The Economics of Unemployment. Shocks, Institution, and Interactions. Introduction", *Lionel Robbins Memorial Lectures*, *mimeo*, London School of Economics, (2000);

Blau F., Kahn L., "Institutions and Laws in the Labor Market", in Ashenfelter O., Card D. (eds) *Handbook of Labor Economics*, volume 3a, chapter 25, (1999);

Boeri T., "Enforcement of employment security regulations, on-the-job search and unemployment duration", *European Economic Review*, 43, p. 65-89, (1999);

Fella G., "Shirking, Labour Hoarding and Efficiency", *mimeo*, (1996);

Jackman R., Layard R., Nickell S., "Combating Unemployment: Is flexibility enough?", *London School of Economics Centre for Economic Performance, Discussion Paper n° 293*, (1996);

Lazear E.P., "Job Security Provisions and Employment", *Quarterly Journal of Economics*, p. 699-726, (1990);

Nickell S., "Employment and Labor Market Rigidities: Europe versus North America", *Journal of Economic Perspectives*, 11, p. 55-74, (1997).

Nickell S., Layard R., "Labour Market Institutions and Economic Performance", in Ashenfelter O., Card D. (eds) *Handbook of Labor Economics*, volume 3c, chapter 46, (1999);

OECD, *Employment Outlook*, Paris, (1995);

OECD, *Employment Outlook*, Paris, (1999);

Scarpetta S., "Assessing the Role of Labour Market Policies and Institutional Settings on Unemployment: a Cross-Country Study", *OECD Economic Studies*, 26, p. 43-98, (1996);

## **Employment protection legislation: a *critical* review of the literature**

Sen A., “L’occupazione: le ragioni di una priorità per la politica economica”, in Ciocca P. (ed), *Disoccupazione di fine secolo: studi e proposte per l’Europa*, Bollati Boringhieri, p. 3-20, (1997).