Reforming an Insider-Outsider Labor Market: The Spanish Experience*

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Abstract

This paper presents a case study on reforming a very dysfunctional labor market with a deep insider-outsider divide, namely the Spanish case. We show how a dual market, with permanent and temporary employees makes real reform much harder, and leads to purely marginal changes that do not alter the fundamental features of labor market institutions. While the Great Recession and the start of the sovereign debt crisis triggered two labor reforms, the political economy equilibrium has not allowed them to be transformational enough.

KEYWORDS: Temporary contracts, dualism, labor market reform, political economy, Great Recession.

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1 Introduction

Since the early 1980s, the main strategy followed by some European countries to adapt labor market institutions to the socioeconomic changes associated to growing globalization and technological progress has been based on introducing labor market flexibility at the margin, by means of widening the scope of so-called *atypical employment*, through temporary and part-time contracts. This, together with the high rates of unionization or coverage of collective bargaining prevailing in these countries, has exacerbated the *insider-outsider* divide in their labor markets. The latter term comes from the insider-outsider model, which explains how unemployment can arise when working conditions, and wages in particular, are determined by taking into account only the interests of employed insiders, thus disregarding the interests of unemployed outsiders.[1]

Though in most instances the introduction of flexibility at the margin was perceived as a transitory measure aimed at counteracting the negative employment consequences of the recessions during the early 1980s and early 1990s, the incidence of atypical employment has continuously increased: in 1980 the temporary employment rate among employees in Europe was around 7.5%, now it is above 15%, reaching maximum values in Portugal (22%) and Spain (24%).

The expansion of 1995-2006 drew attention away from unemployment, but the impact of the financial crisis, the employment consequences of the Great Recession, and the need for supply policies to promote long-term growth in Europe in the context of European Monetary Union (EMU), have again shifted the focus towards new labor market reforms. While the drawbacks of atypical employment were blurred by the boom, with the recession the empirical evidence on its negative economic and social effects has become more salient, so that the need for a different type of labor market reform has become increasingly evident.[2] Given past experience, this time the *dualism* strategy seems discredited and some proposals have started to explore new routes, which are geared towards making labor

[1] This literature started with the the models of Lindbeck and Snower, (1984,1988) and the hysteresis model of Blanchard and Summers (1986)

[2] See International Monetary Fund (2010), especially Box 3.1, and Boeri (2011).

market regulation more efficient, flexible, and simple.[3] These proposals, however, face the difficulty of eliminating an insider-outsider divide that, in some countries, has become entrenched. The reason for its equilibrium nature is that it is beneficial to particular groups of workers and employers, mostly represented by unions and employer associations with institutional recognition and political power.

In this regards, this paper revisits the Spanish case. Building upon a large stream of previous studies on labor market reforms in this country, we now discuss the Spanish labor market performance during the Great Recession (Section 2), highlight the main institutional peculiarities that give rise to an extreme insider-outsider labor market in Spain (Section 3), address some elements of the political economy of labor market reforms (Section 4), describe and assess (negatively) the Spanish labor market reforms undertaken in the midst of the crisis (Section 5), and review some of the recent proposals to reform the Spanish labor market (Section 6). We conclude (Section 7) with some comments on the priority that labor market reforms should have in the program of structural reforms that the Spanish economy urgently needs at the current juncture.

2 Labor market performance in the Great Recession

During last few decades, the Spanish labor market has shown clear signs of a dysfunctional performance. The Spanish unemployment rate has not only been permanently among the highest among OECD countries, but it has also experienced staggering swings: As Figure 1 illustrates starting from around 5% in 1978, the (OECD harmonised) unemployment rate reached a peak above 17% in 1985, fell back to around 13% in 1990, only to shoot up again to more than 19% in 1994. During the long expansion of 1995-2006, the unemployment rate decreased to 8% in 2007. Nowadays, after the huge employment impact of the financial crisis, it is again close to 21%. As shown in the graph, these are much wider fluctuations than those experienced by France, which is representative of the average in the Eurozone. The cyclical features of the Spanish labor market are also remarkable.

[3] See Blanchard and Tirole (2003), Cahuc and Kramarz (2004), Boeri and Garibaldi (2008), Bentolila *et al.* (2008), Ichino *et al.* (2009), and Andrés *et al.* (2009).

Labor productivity and real wages are strongly countercyclical, in part due to employment composition effects derived from the high incidence of temporary contracts, since they are typically associated to low-wage/productivity jobs which are easily created in expansions and quickly destroyed in downturns. Moreover, despite high firing costs for permanent contracts, employment is highly volatile, even more than in countries with low employment adjustment costs.[4]

Bentolila and Jimeno (2006) provided an explanation of the main factors behind the wild ride of the Spanish unemployment rate over the period 1976-2001. It relied mostly on the interaction between macroeconomic shocks and a set of exceptionally unemployment-prone institutions, in particular, employment protection, unemployment benefits, and collective bargaining. The paper cautioned against interpreting the relatively low unemployment rates of the mid-2000s as a sign of a permanent decrease in structural unemployment and called for significant labor market reforms in the wake of the introduction of the euro.

From 2001 to 2007, two key factors supported employment growth. The first one was a significant expansion of credit, induced by the fall in interest rates that followed Spain's accession to EMU and, more broadly, by a pervasive relaxation in the conditions of access to credit. The second factor was a very large immigration inflow which, attracted by the growing specialization of the Spanish economy in low value added and highly labor-intensive industries (construction, turism, personal services) as a result of the investment boom, has substantially modified the demographic structure of the Spanish population. These being the driving forces, growth could not be sustained permanently. Moreover, both labor and total factor productivity growth were very low, and important distortions in the domestic labor and product markets persisted, so that competitiveness deteriorated significantly. This, together with the sharp increase in private sector indebtedness, led to the Spanish economy being increasingly dependent of external financing (the current account deficit reached 10% of GDP in 2007), a situation which made it especially vul-

[3] On employment composition effects on wages, see Carrasco *et al.* (2011). On the consequences of temporary employment, see Dolado *et al.* (2002), and Bentolila *et al.* (2008).

[4] See Costain *et al.* (2011).

nerable in the subsequent global financial crisis. Despite these vulnerabilities, the impact of the financial crisis in Spain was, at least initially, not larger than in other European Union (EU) countries. As illustrated in Figure 2 the cumulative decline in GDP during 2008Q2-2009Q2 was equal to 4.4%, below the EU14 average (i.e. EU15 minus Spain).

The cross-country variation of the growth impact of the crisis is rooted in the nature of the expansion during the preceding period and, hence, in the sectorial specialization when the crisis hit. In countries with high private sector indebtedness, housing wealth was by far the largest component of household wealth (80% of all assets in the Spanish case[5]) and a high share of productive resources were devoted to the construction industry. When a housing bust followed the housing boom, there was a large negative demand shock, derived from the loss of wealth, and also a negative supply shock, linked to the past accumulation of inputs in now highly unproductive industries. Hence, in these countries the financial crisis had significant and long-lasting effects on economic activity. By contrast, in countries where housing prices did not grow much, the sectoral allocation of resources was not distorted by credit conditions, and households were not much in debt. Therefore, the main impact of the crisis was only a temporary fall in aggregate demand, stemming from a significant fall in exports that took place when, following the Lehman Brothers episode (15 September 2008), the financial crisis became systemic and disrupted world trade over 2008Q4-2009Q1. Hence, these countries also had a significant fall in GDP, but it was apparently less persistent.

As is evident from Figure 2, during the 2008Q2-2009Q2 period, the cumulative GDP loss in Spain was much smaller than the employment loss, which was equal to 7%, surpassed only by Ireland. It is often argued that the huge employment-GDP elasticity is due to large employment losses in the construction industry. Figure 3 shows that there is indeed a positive correlation of the housing price growth rate in 2000-2007 with the increase in the unemployment rate in 2007-2009. but there are three countries which are clear outliers in those relationships, namely Ireland, Spain, and the US. Moreover, as revealed by Figure 4, the negative relationship between housing inflation and employment growth also

[5]See Banco de España (2010).

holds when the construction industry is excluded. Hence, this evidence suggests that the main culprit for the large impact on employment must be found elsewhere.

In our search for alternative explanations, we can analyze the role of different factors underlying cross-country variation in the employment impact of the Great Recession. While it is true that the rise of unemployment has been largest in countries experiencing housing booms and external imbalances during the expansion,[6] it is also the case that the so-called Okun coefficient relating unemployment changes to output growth has recently been out of line with its historical values in many countries. Spain, in particular, is one of the countries where employment growth has been much lower and the rise of unemployment has been much larger than expected given the size of the decline of output.[7]

To examine the Okun coefficient, it is useful to decompose the variation of unemployment as follows.[8] Given than $\ln u \approx -\ln e$, where u denotes the unemployment rate and e the ratio of employment (N) to the labor force (LF), and that

$$\Delta \ln N = \Delta \ln Y - \Delta \ln(Y/H) - \Delta \ln(H/N)$$

where H denotes working hours and Y is GDP, we have the following approximate identity

$$\Delta \ln u \approx -\Delta \ln Y + \Delta \ln(Y/H) + \Delta \ln(H/N) + \Delta \ln(LF)$$

Table 1 gives the figures corresponding to this breakdown during the first phase of the financial crisis (2008Q1-2009Q4) for the US, Germany, and Spain. According to the previous identity, the growth rate of unemployment (first row) is the sum of the growth rates of output, productivity per hour worked, hours per worker, and the labor force (rows 2 to 5). This decompositon reveals the reasons why the growth rate of the Spanish unemployment rate during the period 2008-2009 has been twice as high as in the US. First, the decline in output in Spain has been more than twice the fall in the US. Moreover, increases in productivity, hours per worker, and the labor force have also

[6] For a comparison in a larger sample of countries, see European Commission (2011).

[7] See Arpaia and Curci (2010).

[8] This is the decomposition used by Burda and Hunt (2011), in their analysis of the German "Labor Maket Miracle" in the Great Recession, where employment losses have been much lower than expected from the output fall.

pushed unemployment up. The rise in the labor force, in contrast with the boom, is largely not due to immigration but, more likely, to added worker effects.[9] This evolution also contrasts with that of the German labor market where, with a larger decline in output than in Spain, unemployment decreased due to a reduction in labor productivity, hours per worker, and the labor force

The fact that productivity is countercyclical and that wages and hours worked do not adjust in the aftermath of negative shocks in Spain are, to a large extent, the consequences of the institutional framework of the Spanish labor market, which we skecth in the following section.

3 An insider-outsider labor market

The Spanish labor market is characterized by marked dualism. In order to show how this situation came about, in this section we describe the main institutional features of EPL and collective bargaining in Spain, and then discuss the role of their interaction in generating an insider-outsider labor market.

3.1 Employment protection legislation

At the end of the Franco regime in late 1975, severance pay was very high, judicial protection was very stringent, unemployment insurance was very low and limited, and there was no collective bargaining. The main labor market institutions under the new democratic regime were established in 1980 Workers' Statute which, in order to attract union support for a smooth political transition process, maintained the existing employment protection rules, extended unemployment insurance and made it more generous, and established collective bargaining.

The dual approach to EPL in Spain started in 1984, when fixed-term contracts were liberalized, so that, at that time, firms could hire fixed-term employees subject a low severance pay (originally 12 days' wages per year of service, hereafter p.y.o.s.) for *any kind of job*, with a contract duration between 6 months and 3 years and compulsory conversion

[9] See Casado *et al.* (2011).

into permanent once the longest permitted duration was reached. As for permanent contracts, their conditions remained unchanged: workers were entitled to severance pay of 20 days' wages per year of service (with a maximum of 12 months' wages) in the case of fair dismissals and to 45 days' wages p.y.o.s. (with a maximum of 42 months' wages) in case of unfair dismissals. Thus, there was a large gap in EPL between permanent and temporary jobs, collective dismissals required administrative approval (*de facto* not granted without an agreement with worker representatives), economic reasons for fair dismissals included in the law were quite restrictive, and labor courts had a very restrictive reading of those reasons. Moreover, constraints on internal flexibility, arising from regulations on geographic and functional mobility of employees were also strongly bindind. Thus, it is not surprising that soon after the reform almost all hires were conducted under fixed-term contracts and that the incidence of temporary workers exceeded 30% of all employees in the early 1990s.

In view of this dramatic burst of temporary jobs, a long sequence of countervailing EPL reforms have subsequently taken place since 1994 in order to reduce the incidence of temporary jobs. All of these reforms share, to some extent, two common features.[10] First, the conditions for the use of fixed-term contracts have been restricted, although temporary work agencies have been allowed to operate since 1994. Secondly, severance pay for permanent employees has been gradually and mildly reduced. This has been done through several measures. First, 1997 saw the creation of so-called *employment-promotion* permanent contracts, entailing lower severance pay in case of unfair dismissal (33 days' wages p.y.o.s. with a maximum of 24 months' wages), yet targeted to specific groups of workers with lower employment opportunities and excluding most prime-age (30-44 y.o.) employees. Second, in 2002, in case of unfair dismissals, firms were allowed to avoid going to court if they deposited the penalty severance rate and the worker accepted it (thus avoiding also advance notice, the payment of interim wages, and uncertainty on the outcome in court). Then there were also a myriad of small changes in EPL throughout the period.

[10] See Bentolila *et al.* (2008).

On top of this, there have been significant rebates of social security contributions for firms either directly hiring with, or converting temporary into, permanent contracts. The rebates ranged from 40% to 60% during the first two years of contracts used to hire workers in some targeted groups (youth, long-term unemployed, and women underrepresented in some industries). However, since social security contributions are reduced only for a limited initial period (typically up to 3 years), it has been common for firms to fire workers as soon as the subsidy expired, so that there are significant increases in separation rates caused by the subsidy for most groups of workers, especially over the first year (García Pérez and Rebollo Sanz, 2009). As a result, turnover in employment-promotion permanent contracts is much higher than in standard permanent contracts.

Several labor market reforms (in 1994, 1997, 2002, 2006) have played around with combinations of these. They aimed at fighting the prevalence of temporary employment, but they turned out no to be very successful since, by the mid-2000s, the share of temporary workers still remained very high (33.5% of employees), with a large number of contracts being signed each year, more that 20 times the flow of net new jobs, and a low conversion rate into open-ended contracts, around 4% of the total number of contracts. This churning creates an sizeable welfare loss due to the high uncertainty associated with temporary contracts, but it also creates a host of negative effects.

On the efficiency front, Spain has suffered for more than a decade negative Total Factor Productivity (TFP) growth and this is in part related to temporary contracts. Dolado *et al.* (2011) highlights the negative effect of the low conversion rate of temporary jobs into permanent jobs on worker effort and estimates that 20% of the slowdown in TFP in Spanish manufacturing firms over the period 1992-2005 is due to temporary work. This is consistent with the fact that, according to the Survey of Quality of Life in Work, while 40% of permanent employees received training paid by their firms in 2006 (a pre-crisis year), only 23% of temporary employees did.[11]

Last but not least, while temporary contracts were initially limited to younger workers, they are now widespread also among adults. Figure 5 shows that, over the period 1990-

[11] Source: Encuesta de Calidad de Vida en el Trabajo (Quality of Life at Work Survey). We are grateful to Florentino Felgueroso for providing us with these data.

2009, 90% of workers who entered the labor market when they were younger than 21 years old, i.e. the least skilled, start with a temporary contract, but in that cohort 40% still remain in temporary jobs when they are 45 years old. But it is even more striking that the same is roughly true for the more skilled workers who entered the labor market when they were 26 to 30 years old.[12] This finding throws into sharp relief the idea that temporary contracts have largely destroyed the expectations of a professional career for Spanish workers.

Since the peak in 2006Q3, at 34.6%, there has been a substantial reduction in the temporary employment rate of about 10 pp. Part of this drop can be attributed to the huge destruction of temporary jobs in the construction industry, due to the bursting of the housing bubble since the beginning of 2008. In particular, from the 2008Q1 to 2011Q2, 60% of all temporary jobs were lost in net terms (650,000 jobs). As a reaction to the huge employment impact of the crisis, there has been another recent reform of EPL in 2010, which we discuss below. Summing up, despite all these countervailing reforms, the dual nature of EPL is still very pronounced in Spain and firms continue finding it more profitable to hire new workers under fixed-term contracts, despite all the inefficiencies generated by a clearly excessive worker turnover.

3.2 Collective bargaining

Besides dual EPL, the social partners, i.e. labor unions and employers associations, support the insider-outsider model by exploiting collusion opportunities provided by the regulation of collective bargaining. This labor market institution exhibits the following features:[13] (a) high coverage, around 80% of workers, though not so high as in Nordic countries, (b) an intermediate degree of coordination, with collective bargaining agreements being signed predominantly at the industry level though with some geographical decentralization (mostly at the province level), (c) *erga omnes* extension of collective bargaining agreements, namely, that they automatically apply to all workers and firms within

[12] Source: Muestra Continua de Vidas Laborales (Continous Sample of Work Histories). We are grateful to José I. García-Pérez for providing us with these data.

[13] A comprehensive source on the institutional characteristics of collective bargaining is the ICTWSS, see Visser (2011).

their scope, (d) frequent wage indexation rules, applying to around 65% of employees, and (e) frequent social pacts between the major trade unions and employers' association, with some guidelines for wage increases.[14]

As for unions, affiliation is very low in Spain, around 15-20%, being larger in the public sector than in the private sector. Focusing only on the latter, there are large discrepancies according to contract type; for example, the affiliation rate is equal to 18.6% among permanent workers, but only to 7.8% among temporary workers. It also increases with age, going from 3% of permanent employees aged 16-24 to 25.5% of those aged 55-64. A similar increase is observed with seniority and with firm size, from 7% of permanent employees at firms with 1-10 employees to 31.8% for those at firms over 250 employees (data for 2006 from Dolado *et al.*, 2010).

There is little incentive for workers to become affiliated to labor unions, since industry-wide collective agreements are extended to all workers regardless of affiliation status (see below). The relative power of different unions depends on the legal regulation of worker representation. Worker representatives are chosen by firm-level elections, which take place every four years in establishments above 5 employees. Labor unions which surpass 10% of the total number of worker representatives in a given industry (or 15% in a given region) obtain the status of being "highly representative", which allows them to participate in all bargains in the domain of the collective agreement. There are only two labor unions with such representative status at the national level, Comisiones Obreras (CCOO) and Unión General de Trabajadores (UGT), though there are other smaller unions which also attain that status in a given industry or region.

Given their low affiliation, labor unions obtain a very small share of their income from members. There is little information on union sources of funding, but most of it comes from the public sector. For example, in 2009, the two main unions received around 14.5 million euros from the national government for their worker representation activities and their participation in official entities, while another share of public money comes from their involvement in training activities. Many regional governments channel funds to unions

[14]The latest agreement of this type was struck in 2009 for the period 2010-2012.

for their involvement in various activities, such as accident prevention, worker placement, and training. Lastly, unions also obtain funds by charging non-affiliated workers for their services (e.g. in bargaining about collective dismissals).

How representative are labor unions? An important feature is that there are restrictions on who may participate in firm-level elections. In particular, elections in establishments up to 5 employees are forbidden, and neither those employed with the firm for less than one month nor those on lease from temporary work agencies can vote, nor can the unemployed either. According to Dolado *et al.* (2010) in 2007 these criteria excluded around 30% of all employees and, in particular, 41% of workers aged 16 to 24.

As to employer associations, there is a national one, the Confederación Española de Organizaciones Empresariales (CEOE), which is in fact a confederation of 230 federations (175 are industry-specific and 55 are territorial), which themselves integrate more than 5,000 organizations comprising around 1.45 million firms and entrepreneurs. Though there exists an associated confederation of small and medium-sized firms (Confederación Española de la Pequeña y Mediana Empresa, CEPYME), CEOE is essentially run by large companies. Like with labor unions, little information is available on its funding; some comes from its member organizations and another part from their involvement in official entities and training activities.

The institutional setting of collective bargaining reinforces the dual nature of the Spanish labor market. With representation in most bargaining units being at the industry level, the major trade unions are able to set wages for the whole economy. On the firms' side, employer representatives see collective bargaining agreements as an instrument to *regulate* competition, by imposing wage and employment conditions on all firms, regardless of the proportion of firms represented in the bargaining unit. As a result, bargained wages do not react much to changes in firm-specific productivity, while, due to the prevalence of wage indexation rules, they quickly adjust to increases in inflation. As a result, real wages –and relative wages across industries– display a high degree of rigidity.

3.3 Interactions between EPL and collective bargaining

The Spanish labor market stands out as an extreme case of a *dual labor market* in which the insider-outsider divide is very pronounced. There are two fundamental reasons. The first one lies with some peculiarities of the employment protection legislation (EPL, henceforth), which gives rise to a very high incidence of fixed-term jobs and to the concentration of worker turnover in very particular segments of the labor market. The second is the automatic extension of collective bargaining agreements to all firms, regardless of the representativeness of the employer confederation signing the agreement and the economic and financial situation of the affected firms. This gives rise to two types of workers, and also two types of firms.

First, there are workers employed under the regular (full-time, open-ended) contracts subject to high firing cost and covered by collective bargaining agreements that protect wages and employment conditions against inflation and adverse productivity shocks. By contrast, workers under fixed-term contracts (among which youths, women, and low-skill workers are overrepresented) can be easily dismissed, so that they suffer the main burden of the adjustment to productivity or demand shocks. Regarding firms, large and high-productivity firms are less constrained by these regulations, as for them firm-level bargaining is more accessible and wage levels are often above those set in industry-level collective agreements. At the same time they can use these levels as a barrier to entry and an instrument to reduce competition from smaller companies. Small and low-productivity firms are much more constrained by industry-level collective bargaining, and therefore their prospects for growth are more limited.

Thus, while the insider-outsider models of unemployment mentioned in the introduction associate insiders with employees and outsiders with the unemployed, in a two-tier labor market this partition is not right, since temporary workers have very little employment protection and therefore suffer very high turnover. As a result, they typically have a weak attachment to each individual firm, so that it is natural for their interests to be neglected by permanent employees. Therefore, the interaction between the collective bargaining regulation and EPL affords unions and employers confederations very powerful

instruments to reinforce the insider-outsider divide. For example, Jimeno and Toharia (1996) found that incentives to exert effort and avoid absenteeism were relatively higher for temporary workers who, given their very low firing costs, feel the threat of dismissal much more than permanent workers. And Bentolila and Dolado (1994) found that, using temporary workers as a buffer against employment destruction, insiders can increase their wages without putting their jobs at risk.

Many studies on wage dynamics have found that nominal wage growth in industry-wide agreements is essentially determined by inflation, and, on the other hand, that wages hardly respond to productivity changes and respond only mildly to changes in unemployment.[15] Thus, massive employment losses during the Great Recession, since they have fallen to a large extent on temporary workers, have not triggered wage moderation.

4 The political economy of labor market reform

Structural reforms are usually hard to carry out. The reason is that there always exist population groups that are negatively affected by reforms and thus try to block or soften them. As a result, reforms require some political majority and certain economic conditions to materialize.[16] The last pre-Great Recession major labor market reform in Spain took place in 1997, with an isolated (but eventually important) reform in 2002. This is not so surprising since the boom lasted from 1997 to 2007, and there is usually little incentive for politicians to reform in expansionary phases. However, the unemployment rate surged from 8% in 2007Q3 to 17.4% in 2009Q1, and yet it took until June 2010 for the first labor reform during the Great Recession to happen. We now discuss why and how that reform and other measures that followed were undertaken. We start by reviewing the literature on the determinants of structural reforms and then discuss the specificities of the Spanish setting.

[15] For instance, Bentolila *et al.* (2010) found that a 1% upward deviation from the reference expected inflation rate, which was around 2% in the latter part of the boom, is associated with a 1.1% increase in nominal wages, whereas a 1% downward deviation is associated with a 0.3% fall in nominal wages. They also found that a 1 percentage point increase in unemployment only reduces wages by 0.2% and that there is no significant association of wage growth with productivity growth.

[16] See Saint-Paul (2000).

4.1 What factors trigger reform?

The literature on the timing of structural reforms has not yet provided a set of strong and widely accepted factors that are conducive to reform. We therefore provide a very brief review of a few representative results found in the literature.

Saint-Paul (2002) finds that the relationship of the business cycle with the timing of labor market reforms is not robust, except for marginal reforms –i.e. those that do not strongly alter labor market institutions– and for two-tier reforms that only affect the flexible tier of the market, e.g. fixed-term contracts. An important finding is the *exposure to risk* effect, namely that reforms happen when unemployment is rising, not just when it is high, so that insider workers are in danger of losing their jobs. Another interesting result that across-the-board reforms are mostly undertaken by right-wing governments.

Duval and Elmeskov (2005), referring to structural reforms in general, find that economic crises and high unemployment do induce reforms. Somewhat surprisingly, they also find that absence of monetary policy autonomy is associated with lower structural reform activity.[17] Other results are that a sound fiscal balance may help undertaking reforms and that reforming one area (say the product market) helps reform in other areas.

Another OECD paper, by Høj *et al.* (2006), reports results indicating that big economic crises are associated with higher overall reforms, but in the cases of job protection and benefit systems reforms happen mostly in strong upswings. They also find that governments that have been in office for some time are more able to reform and that, on average, left-of-center governments reform less. These authors also confirm the last two conclusions of Duval and Elmeskov (2005).

4.2 Serial reformers?

As discussed earlier, labor market reforms are hardly unknown in Spain. Thus, one could argue that, on top of the standard resistance to reform, Spain also suffers from reform fatigue. It is therefore instructive to compare the Spanish experience regarding

[17] This is against the "There Is No Alternative" (TINA) hypothesis, see Bean (1998) and also against the weak empirical evidence for increased labor reform in EMU countries vis-à-vis non-EMU European countries in Bertola (2010a).

employment protection with that of the three other major continental European economies –France, Germany, and Italy– to check if there are objective grounds for fatigue, i.e. to ask whether Spain has experienced an unusual frequency and/or intensity of labor market reforms. In Table 2 we show (in percentages) the fraction of years in which there have been measures reforming EPL, as well as the fractions of measures which have been flexibility-increasing (as opposed to decreasing), structural (v. marginal), complete (v. two-tier) and discrete (v. incremental), all of them as labeled in the Fondazione Rodolfo DeBenedetti–IZA Social Reforms Database (www.frdb.org), see Boeri (2011).

Are the reform frequency and intensity comparatively high? Table 2 shows that the frequency is similar, and if anything, reforms have been less flexibility-increasing, less structural, and more incremental, though slightly more complete than in the other countries. Given this evidence, it is hard to argue that there are objective grounds for the Spanish citizenship to be comparatively more reform-fatigued than its neighbours. But it may still be that perceived insecurity is very high in Spain. Let us look at the data.

4.3 Perceptions of insecurity

Do Spanish workers feel very insecure in their jobs? At first blush, not really. In 2005 Spain ranked sixth in the share of respondents who strongly agreed with the statement "My job is secure", only below Denmark, Slovenia, Ireland, Romania, and the US, among 19 nations.[18] Though there surely are business cycle effects, note the lack of correlation with standard indices of employment rigidity: three of those high-security perception countries feature very lax EPL, whereas the other three have very stringent EPL. Indeed, Dolado *et al.* (2010) argue that there is U-shaped relationship: perception of insecurity is high at those two extremes and lower in the middle.

Moreover, as these authors remark, there is a fallacy of composition. There are large difference in opinions about job security among different population groups. Temporary contracts are more prevalent the younger the workers and this clearly shows up in per-

[18] The other countries are Belgium, Bulgaria, the Czech Republic, Finland, France, Germany, Hungary, Latvia, Norway, Portugal, Sweden, Switzerland, and the United Kingdom. Source: Dolado *et al.* (2010) based on data from the International Social Survey Programme (www.issp.org).

ceptions. Figure 6 breaks down perceptions of job insecurity by age group. Spain shows a steep upward pattern which is quite uncommon in the other economies included in the survey. The average for the other 18 countries shows hardly any slope from 16-24 to 45-54 years old. In fact, the degree of insecurity perceived by Spanish 16-24 year olds is one standard deviation above that average and insecurity perceived by 45-54 year olds is 1.7 standard deviations below the average.

These differential perceptions have been validated by subsequent developments. From 2007:Q4 to 2010:Q4 employment of the 16-24 year olds fell by 41.9% but that of workers aged 45-54 years old grew by 2.4%. This is a much larger difference than in the Eurozone, where the respective figures were -13.3% and 4.6%, i.e. an 18 percentage-point difference versus the 44.3 pp for Spain. Both perceptions and realizations confirm the deep divide between insiders and outsiders. However, since political economy is driven by votes, do these perceptions translate into a differential degree of support for labor market reform?

4.4 Political support for reforms

What are voter attitudes regarding labor market reform? Table 3 presents the percentage share of respondents in Spain and in the EU15 countries, and according to different characteristics, who agree with the following statement: "Work contracts should become more flexible to encourage job creation", from the May-June 2009 Eurobarometer (source: Dolado *et al.*, 2010).

The survey data reveal that there is indeed more resistance to labor market reform among Spanish nationals than among EU15 citizens, though all the shares are still above 50%. There is again a much larger gap between the 16-24 year olds and the 45-54 year olds in Spain (4.8 pp) than in the EU-15 (0.6 pp). It is also noticeable that the social groups that are more favorable to labor reform are low-skill employees and the unemployed, which are not the most politically influential.

Let us now look at what support could be expected from the insiders. As already pointed out, according to Saint-Paul (2002), labor reform is more likely to happen the higher is the exposure of insiders to the risk of job loss. Following the arguments given

in Section 3, we shall consider that the insiders are those with permanent jobs, whereas temporary employees and the unemployed are outsiders. Moreover, among employees with permanent contracts, there are some with the old "ordinary" contract (entitled to 45 days' wages p.y.o.s., with a maximum of 42 months' wages in case of unfair dismissal) and entrants hired under the new, employment-promotion permanent contract (entitled to 33 days' wages p.y.o.s., with a maximum of 24 months' wages in case of unfair dismissal). Since, as indicated above, the turnover rate of the latter is much higher than for the former, it is therefore unclear whether their interests regarding labor market reform are close to those of workers on ordinary contracts.

Taking these caveats into account, Dolado *et al.* (2002) argue that the likelihood of labor market reform should be higher if outsiders represent the majority of the labor force. They construct two indexes of the weight of outsiders in the Spanish labor force, depending on whether or not workers under the employment-promotion permanent contracts are considered as insiders. Figure 7 plots these two indexes for the period 1987Q2-2011Q2. The lesson to be drawn is that the 1994 and 1997 reforms took place at a time when outsiders outnumbered insiders (i.e., their incidence was above 50%). Then, as a result of these reforms and of the subsequent long expansionary phase from 1997 to 2007, the fall in unemployment and the rise in the use of permanent contracts for new hires implied a large reduction of the fraction of outsiders quite below 50%, which is consistent with the lack of major reforms during this period. Note that, even after the adverse employment effect of the Great Recession, the fraction of temporary workers and unemployed remains around 42% since most dismissed workers previuosly held a temporary contract, so that there has been a sizeable change in the composition of outsiders but not in its size. If we adopt the wider measure of outsiders that also includes workers under employment-promotion contracts, the fraction of outsiders gets closer to 50%, though in literal terms it is still below the majority. We therefore do not get a clear signal from this indicator on why another reform took place in 2010.

Alternatively, it is interesting to look at how employment losses have been distributed among workers according to contract type. As can be observed in Figure 8, temporary

jobs have fallen precipitously since the early phases of the crisis, while permanent jobs kept on rising, suffering the first drop only in 2009Q3. Taking 2007Q3 as the start of the recession, the stock of employees on temporary contracts has fallen by around 30%, whereas permanent employment has only fallen below the 2007Q3 value in 2011Q1. These figures suggest that insiders have not been overly exposed yet, though their jobs are starting to feel threatened. Quite tellingly, Dolado *et al.* (2010) estimate that 99% of job losses from 2007Q3 and 2009Q3 came from workers not affiliated with labor unions.

5 Crisis-induced reforms

5.1 What triggered labor reforms?

The extraordinary rise in unemployment in Spain since 2007 was insufficient to trigger labor market reform. Before and during the Great Recession, the Spanish Socialist government did not think that such a reform was necessary and stated that, in case one were to be undertaken, it would come from an agreement between the social partners, i.e. the two main labor unions and the employer's association. Talks were held between those partners for more than two years without any agreement.

At that stage of the crisis (around November 2009) the standard measure of the risk premium on public debt, the differential between the yield of the Spanish 10-year bond and the equivalent German *Bund* stood at 55 basis points. December 2009 brought the start of the crisis that eventually led to the first Greek bailout, with the Spanish differential raising to around 70 basis points in March. Then risk premia escalated in most peripheral Euro Area member countries, reaching a sharp peak of 165 basis points on 7 May. At a momentous weekend summit, on 9 May 2010 the European Union agreed to create the European Financial Stability Facility (EFSF), a special purpose vehicle financed by members of the Eurozone to combat the European sovereign debt crisis. Subsequently, on 12 May the Prime Minister, Mr. José Luis Rodríguez Zapatero, announced sizeable cuts in the government budget, including a 5% reduction in public sector pay in 2010 and the freezing of public sector pensions in 2011. After a brief fall, the risk premium sharply rose from 95 basis points, when the May budget cuts were announced, to 217

basis points on 16 June 2010. This date marks both the passing of a labor reform decree by the Government and the peak in the risk premium, which fell thereafter and did not surpass that date's value until November, when the Irish debt crisis erupted.

Hence, forced by the financial markets' external threat, the Government abruptly changed its views on the necessity of a labor market reform, and put some more pressure on social partners to reach an agreement. In early February 2010 the Government had issued a set of guidelines for EPL reform to be discussed by the social partners and to be used as the foundations for the reform. Nevertheless, as talks stalled, it went ahead with a reform that followed the same strategy of the previous ones, namely, mildly reducing dismissal costs and relaxing dismissal restrictions under the employment-promotion permanent contracts while doing the opposite for temporary contracts.

As to changes in the regulation of collective bargaining, the reform process and the results were similarly meager. After the EPL reform, trade unions called for a general strike on 29 September 2010, which was largely a failure. However, one month later a new Minister of Employment was appointed –a card-carrying member of one of the two main labor unions, who had attended the general strike demonstrations–, with the main goal of restoring the social dialogue. Then, some guidelines for the reform of collective bargaining were issued and the Government waited for the agreement between the social partners on collective bargaining reform. The agreement never came and the Government proceeded again with another mild reform in June 2011 (see below).

5.2 Contents of the reforms

At first glance, the 2010-2011 reform was quite comprehensive, affecting the following four areas: severance pay, hours reduction, active labor market policies, and collective bargaining. A summary of the key measures follows.

Firstly, in the area of individual dismissals, there were several noticeable changes:

1. In dismissals for economic reasons, current and expected losses or a persistent reduction in revenues were included as causes for fair dismissal. Other, broadly-understood, economic reasons –technological, organizational, and productive– were

explicitly defined for the first time. Advance notice was reduced from 30 to 15 days.

2. A new employment-promotion permanent contract was introduced, reducing the group of workers for whom it was not applicable and making applicable to this contract the *express dismissal* procedure, i.e. maximum severance pay of 33 days' wages p.y.o.s. to avoid going to court (previously firms paid 45 days through a disciplinary dismissal).

3. For temporary contracts, severance pay was raised progressively from 8 days of wages p.y.o.s. to 12 days (to be reached in 2015).

4. The duration of a sequence of temporary contracts of a given worker in the same firm was capped at 3 years for hitherto unlimited specific-work contracts.[19]

Secondly, in line with the succesful experience of the *Kurzarbeit* programme in Germany, hours reductions were facilitated, by reducing social security contributions on firms and reducing the subtraction from workers' entitlements of any unemployment benefits received due to hours reductions.

Thirdly, in the realm of active labor market policies, the groups of workers eligible for subsidies on job creation were restricted and private placement agencies were authorized for the first time.

Lastly, regarding collective bargaining, firms in distress were allowed to opt out of the industry, collective-bargain wage level by reaching an agreement with its workers, though the corresponding level had to be achieved again in no more than 3 years. The additional reform of collective bargaining in June 2011 established that firm-level agreements have precedence over the corrersponding industry-wide agreements, though this rule applies only if the latter does not say otherwise. Also, over the subsequent year, agreements that expire without a renewal by consensus being feasible will need to be subject to arbitration (until industry-wide agreements decide on whether this should be the rule).

[19] However, in September 2011 the maximum duration extension of all temporary contracts was extended to 4.5 years, until September 2013.

5.3 What kind of reforms?

As mentioned earlier, in our view, labor reform was triggered by external pressure coming from international financial markets. We are not the first to argue about this channel for reform. Bertola (2010b) indicates that countries suffering high public debt are more likely to undertake labor reforms and finds some empirical evidence weakly supporting this claim. While causation is clear for countries that had to be bailed out, i.e. Greece and Portugal (whose respective Memorandum of Understanding with the ECB-EU-IMF *troika* include very specific labor market reform measures), it is not so apparent for non-bailed out countries.

The source of the reform does matter. Since neither the Government nor the social partners were interested in the reform, the kind of reform that was undertaken did not significantly reduce the fundamental insider-outsider divide in the Spanish labor market. Firstly, the reform included measures that labor unions disliked, but it was made more palatable by reducing its scope. Indeed, the two most important institutions generating high and volatile unemployment, but which also benefit both employers and labor unions, were modified but in a sufficiently marginal way that their core was left in place. These are the dual EPL (see Saint-Paul, 2000) and the regulation of collective bargaining (subject to the caveat that current status quo may unravel if the social partners do not reach an agreement to preserve it, which may be in the interest of the employers' association). Secondly, some of the measures introduced were meant to benefit insiders, such as the subsidies for reduced hours (as opposed to dismissals).

It is still too early to assess the effect of these reforms, though the prospects are far from good. The latest forecasts at the time of writing this paper are that employment may fall again in 2011Q4 (at an annual rate of -1.5%), that unemployment may exceed 5 million at the end of this year, and that bargained wage growth remains at 2.7% while core consumer price inflation is around 1.5% and the GDP deflator around 2%. In view of these adverse circumstances, in the next section we propose a set of measures of labor market reform that we believe should be undertaken to help reverse the insider-outsider nature of the Spanish labor market, so as to permanently reduce its unemployment rate.

6 Towards eliminating the insider-outsider divide

As argued in the previous sections, despite a long sequence of unsuccessful reforms at the margin, the very high and persistent segmentation prevailing in the Spanish labor market since the late 1980s is the key factor behind its huge employment and unemployment volatility. Temporary contracts do not only bear the brunt of the adjustment during recessions but they also negatively affect the career developments and labor productivity of temporary workers (typically young, female, and low-skill), who face a low probability of advancing towards a long-term employment relationship.

Given these negative effects, clearly illustrated by the evolution of the Spanish labor market since the onset of the Great Recession, there is a growing consensus among academics that more reforms at the margin, like the one approved in 2010-2011, are bound to remain ineffective. On the one hand, timid attempts to reduce severance pay for some permanent contracts that are not available for all workers still leave a too high firing cost gap, as reflected by the scarce use of the new employment-promotion contracts. On the other, moving back to the labor market of a few decades ago by severely penalizing the use of temporary contracts while keeping the current levels of EPL for permanent contracts is not a viable option either. This would just prevent job creation in the subsequent recovery and make the labor market uniformly much more rigid. Thus, a more radical approach is needed to reduce the firing cost gap between permanent and temporary workers, thus paving the way to a *quality job*-rich recovery and, foremost, to a better balance between flexibility and social protection. More specifically, new regulations need to be introduced so as to provide a viable alternative for firms to the overuse of temporary contracts, with the key goal of eliminating the detrimental effects of the excessive churning of temporary workers on job stability, training, and future career prospects.

6.1 A single open-ended contract

In parallel with a few other similar policy initiatives in Europe, a manifesto signed by 100 academic economists, see Andrés *et al.* (2009), was launched in Spain defending the

idea of eliminating the firing cost gap once and for all.[20] To achieve this goal, a key policy advice in this proposal is the introduction of a single open-ended contract (SOEC hereafter) for new hires, at the same time that temporary contracts –with the exception of replacement contracts for maternity or sickness/disability leaves– are abolished. The key feature of SOEC is that it has no *ex-ante* time limit (unlike fixed-term contracts) and that severance payments smoothly increase with seniority, instead of having the same indemnity per year of service applying from the first day after the end of a short probation period (unlike current open-ended contracts). In this fashion, and in contrast with the current regulation of permanent contracts, the SOEC provides a sufficiently long entry phase and a smooth rise in protection as job tenure increases. The rationale for this gradually increasing profile of severance pay is that the longer a worker stays in a given firm, the larger is her/his loss of specific human capital, as well as the psychological costs suffered in case of dismissal.[21]

A substantial advantage of SOEC over the current dual EPL regulation is that it drastically reduces the marginal cost, in term of expected severance pay, faced by employers when deciding whether to upgrade expiring temporary contracts into permanent ones. This large reduction in the marginal cost of contract extensions (of 2 or 3 days' wages p.y.o.s. until a reasonable steady value is reached after 10 years, say) is likely to prevent the massive redundancies and huge turnover of temporary workers that have taken place in the last two recessions under the current regulation. The reason is that the entry phase with low firing costs will encourage job creation and reduce inefficient churning of temporary workers, while the very gradual increase in severance pay will foster longer job durations without necessarily harming employers, as uncertainty about the quality of job matches entails a much lower cost. As discussed below, even if the expected compensation p.y.o.s. turns out to be to be lower under the SOEC than under current EPL rules, it is quite plausible that the longer job tenure induced by the fall in the firing cost gap will

[20] Among these proposals are those of Blanchard and Tirole (2003) and Cahuc and Kramarz (2004) for France, Boeri and Garibaldi (2008) and Ichino *et al.* (2009) for Italy, and Bentolila *et al.* (2008) for Spain.

[21] See Blanchard and Tirole (2003).

increase the total expected compensation received by dismissed workers, echoing a Laffer curve effect.

To illustrate these ideas, let us consider a Spanish worker with a prototypical job tenure of 10 years, where the first 2 years are under a temporary contract and the remaining 8 years under a permanent one. Figure 9 depicts the marginal severance pay in case of dismissal up to 10 years working at the same firm under current EPL regulations with the rights that would be provided by a conceivable specification of a SOEC. The latter (labeled as SOEC 12-36 hereafter) starts with 12 days' wages p.y.o.s. and grows by 2 days per year to a maximum of 36 days' wages, so that compensation is incremental, with a maximum of 24 months' wages. Under current regulations, since firing costs for a temporary contract entails 8 days' wages p.y.o.s., while those of a permanent contract typically amount to 45 days' wages p.y.o.s. (after Law 45/2002), the expected total dismissal cost to the firm would be 376 days' wages (=2×8 + 8×45). The alternative option for the firm would be to use five temporary contracts in sequence (offered to different workers) instead of converting the temporary contract into a permanent one after the first two years. In this case, the firm would pay 80 days' wages (=8×10). Thus, the gap in expected firing costs for the firm of contract conversion amounts to 296 days' wages (=376-80), i.e. slightly more than 80% of a yearly wage. In contrast, under SOEC 12-36, the expected total severance pay would be 210 days' wages (=12+14+...+30), so that the firing cost gap would fall to only 130 days' wages (=210-80). This amounts to a reduction of 56% *vis-à-vis* the current regulation, which is bound to increase job creation and job duration significantly, as well as to reduce job destruction. The combined effect of these favorable outcomes should lead to a noticeable reduction in unemployment.

6.2 Evaluating the effects of introducing a single open-ended contract in Spain

There have been a few papers quantifying the above-mentioned implications of the SOEC proposal that we summarize in what follows. The first strand of this literature relies on calibrating search and matching models of the labor market, along the lines of Mortensen

and Pissarides' (1994) classical model with endogenous job creation and job destruction, but extended to allow for the existence of temporary and permanent contracts entailing very different dismissal costs.[22]

Bentolila *et al.* (2011) explore what proportion of the much larger increase in Spanish than in French unemployment during the Great Recession is due to the larger firing cost gap in Spain than in France. They focus on a comparison of these two neighboring countries not only because they share quite similar labor market institutions, including the use of temporary contracts, but also because their unemployment rates just before crisis were almost identical (around 8% in 2007). Yet, while the unemployment rate in France has only increased by 2 percentage points (pp) by the end of 2009, it shot up to 19% in Spain over that period (21% nowadays). As argued by these authors, the fact that both countries exhibit similar overall indexes of strictness in EPL according to the well-known OECD (2004) rankings, is due to how these indexes are constructed, i.e. on the basis of legal regulations and not on their implementation. Indeed, when analyzing the enforcement of the legislation, they find that *de facto* EPL of temporary jobs is much weaker in Spain than in France, whereas the opposite holds for regular permanent jobs.

Further, to estimate the relevant EPL gap in each country, they adopt the conservative view that what matters in order to measure the effects of firing costs on employment is not legal severance pay per se, which is a transfer from the firm to the worker and may therefore be compensated for in the wage bargain.[23] Rather, what matter are other costs generated by third agents, like labor courts and labor authorities, which cannot be appropriated by firms and workers and therefore cannot be neutralized through wage bargaining. These are the so-called red tape costs, which they estimate to be 50% higher in Spain than in France. In view of this large firing cost gap, the research question they address is by how much would Spanish unemployment have been reduced during the Great Recession, relative to its actual rise, had Spain adopted the lower French EPL gap before the start of the slump, instead of keeping its own EPL regulations.

[22] This generalization is inspired by Blanchard and Landier (2002) and Cahuc and Postel-Vinay (2002), whiich are the first papers to allow for dual contracts in search and matching models.

[23] See Lazear (1990).

Their strategy is to calibrate the above-mentioned analytical model to match the main stylized facts (average flows and stocks) in the French and Spanish labor markets before the recession (2005-2007). Then, keeping invariant the calibrated parameters in this first stage, they proceed to match the new stylized facts during the recession (2008-2009), by allowing only for an adverse aggregate productivity shock and a negative reallocation shock. These two shocks are meant to capture, respectively, the severity of the recession and the increase in mismatch induced by the collapse of the construction industry as a result of the credit crunch. Once the model is well calibrated in both the good and bad state, they run a counterfactual simulation during the recession (imposing the same adverse shocks estimated before) where the Spanish EPL gap is replaced by the much lower French gap.

Their main finding is that, with the French EPL gap and taking into account its indirect effect on reducing mismatch, Spanish unemployment would have increased by 45% less than what it actually rose (i.e. from 8% to 14%, rather than to 19%). Further, a similar counterfactual simulation during the preceding expansionary period yields that unemployment would have been 2 pp lower during 2005-2007, i.e 6% rather than 8%. Overall, these results indicate that facilitating the widespread use of flexible temporary contracts is more likely to raise unemployment on average over the business cycle in labor markets already regulated by rather stringent permanent job security provisions due to the inefficient turnover of temporary workers.

A related paper is Costain *et al.* (2010), which addresses the issue of high unemployment volatility in strongly dual labor markets. Rather than focusing a single event, like Bentolila *et al.* (2011) do with the Great Recession, these authors study labor market dynamics over the business cycle following a sequence of auto-correlated, match-specific productivity shocks. After calibrating a similar search and matching model with permanent and temporary contracts to the Spanish labor market during 2001-2008, they compare the volatility of unemployment under two alternative scenarios regarding firing costs: under the current, dual EPL and under a unified labor market with a single contract where firing costs are equal to the average severance pay in the dual labor market

(but where the firing cost does not increase with job tenure). Their main finding is that the unemployment rate in the dual labor market fluctuates 21% more than in the unified case.

The intuition behind this result is that while new permanent jobs must have relatively high productivity (to compensate firms for future high severance pay), in temporary jobs with low or no dismissal costs firms are instead willing to hire workers with lower productivity. Hence, the latter jobs become very *fragile* as soon as there is an adverse shock. In other words, the stock of fragile jobs accumulates rapidly in expansions and becomes immediately destroyed when a recession hits. According to these results, introducing a single contract would unambiguously reduce volatility but, by hampering the hiring of low productivity workers, it would also increase unemployment by 2 pp (from 10% to 12% during the calibration period). Their simulations show that, in order to avoid this rise in unemployment, average firing costs would have to fall by 60% over the sample period. Interestingly, as discussed above, this reduction in average firing costs turns out to be quite similar to the one implied by the introduction of SOEC 12-36.

The quantitative evaluation of the effects of the SOEC 12-36 proposal is directly addressed in this type of search and matching models by García Pérez and Osuna (2011), which analyzes the transition between the existing dual EPL and this specific design of SOEC. They focus not only on simulating the effects of this change of regulations on unemployment but also on how this change would have affected workers' job tenures over the period 1998-2009, which comprises both a long expansionary phase and the subsequent abrupt recession. Their strategy is similar to the one used in the previous two papers: calibrate the parameters of the model to match the main stylized facts of the Spanish labor market over the chosen period and then run counterfactual simulations under SOEC 12-36. Their results show not only that the unemployment rate would be 3 pp lower under the single contract but, more importantly, that the number of workers with job tenure below one year would be almost 25% lower than under current EPL, while the number of workers with tenure longer than three years would become 15% higher under SOEC 12-36. The intuition for these results in again similar to the one discussed above: under

the latter contract, the probability of being fired in contracts with tenure below four years is almost halved, because firms are much less reluctant than before to destroy jobs since they are costlier (12 days' wages p.y.o.s. *v.* 8 days' wages p.y.o.s.) and because the jump in severance pay (from 8 to 45 days' wages) has been replaced by a much smoother gap (2 days for each year the contract is extended, up to an upper bound of 36 days' wages).

A second strand of this literature uses a different simulation approach to evaluate some other relevant consequences of the introduction of SOEC 12-36, as well as those of other alternatives, like a combination of a single contract and a capitalization fund for dismissals, in line with the so-called *Austrian model*. The idea behind this fund is that, rather than paying a statutory severance pay to the worker at the termination of a labor relationship, firms deposit every year a given (small) amount of days of salary for all their workforce, to be subtracted from employer social security contributions, into a sort of *private fund* for every worker, that they can use throughout their working life in case of dismissal, relocation, engagement in educational activities or even upon retirement. The idea is that a worker's fund does not disappear simply because the worker changes jobs –as happens with current EPL– and it therefore fosters worker mobility. In particular Conde-Ruiz *et al.* (2011) focus on the effects of introducing two alternative single contract schemes on the expected average severance paid by firms and received by different types of workers after 10 years, relative to what they would respectively pay and receive under the status quo.

The first scheme is SOEC 12-36, while the second scheme is a combination of a SOEC entailing lower firing costs, increasing from 12 to 24 days' wages in 7 years, with a capitalization fund of 3 days' wages per year (SOEC 12-24 +F3), both with a maximum entitlement of two years' wages. To simulate these effects, they use information at the individual level on wages, hiring, firing, and contract conversion rates for unemployed, temporary, and permanent workers over their working life, using a 1% random sample of the Spanish social security registers for 2009.[24] The paths arising from these rates are then projected over the next decade to evaluate the effect of alternative EPL regulations.

[24]The database is the Continuous Sample of Working Lives (Muestra Continua de Vidas Laborales, Ministerio de Trabajo y Seguridad Social, 2002-2009).

Specifically, drawing from the results about the endogenously determined job creation, job destruction, and contract conversion rates obtained by Costain *et al.* (2010) and García Pérez and Osuna (2011) in their counterfactual simulations of general equilibrium search and matching models, it is assumed that the firing rate under SOEC will be on average 60% lower than those observed for temporary workers with less than 4 years of job tenure and 35% higher for permanent workers with job tenure above 4 years. The latter is assumed to capture the potential adverse effect of a SOEC reform exclusively applied to new workers (i.e. not retroactively) on workers with *old* permanent contracts, through a replacement of these workers –entitled to high firing costs– by new contracts under the cheaper SOEC. The main finding of these (partial equilibrium) models is that SOEC 12-24+ F3 provides on average 15% higher severance pay for workers than under the status quo and 13% more than under a pure SOEC 12-36, while the average firing cost to firms over the 10 year period is more or less the same. Thus, the mixed proposal of a SOEC and a capitalization fund seems to be a more beneficial alternative in order to reduce the degree of segmentation in the Spanish labor market via its effects on job duration, job mobility, and greater incentives to invest in human capital.

6.3 Other policy proposals

A SOEC would not be the cure-all for the Spanish labor market. The extremely high unemployment rates that have been reached are the result of a systemic failure, involving also the structure of collective bargaining, unemployment benefits, and active labor market policies. In this section we briefly review appropriate lines of reform in those areas.

Among the many government policies that can affect wage developments (public sector wages, minimum wages, labor taxation, etc.), the regulation of collective bargaining is probably the one having the strongest bearing on labor cost developments. The coverage of collective bargains, the level at which wages are set, the extension of bargained wages to workers and firms outside the scope of an agreement, the existence of coordination mechanisms or the application of wage indexation clauses are clearly determined by the social partners. But these features are very strongly influenced by both labor legislation

and the intervention of governments in the social dialogue.

As indicated in Section 3, empirical studies reveal little real wage adjustment to unemployment or to productivity changes. This yields a significant increases in equilibrium unemployment, as has been documented by Jimeno and Thomas (2011), using a calibrated version of a Mortensen-Pissarides model with heterogenous firms. They also show that allowing for opting-out of industry-wide collective barganing agreements would reduce unemployment to the same level achieved under efficient firm-level bargaining without major changes in either average wages or wage inequality. Real wage rigidity has two important consequences in the current situation. First, regarding the employment impact of the crisis, the lack of wage adjustment increases job destruction. Secondly, looking ahead, the requirements for restoring output and employment growth, namely nominal adjustment, the closing of the competitiveness gap, and the reallocation of resources from the non-tradable to the tradable sector, and all are harder to implement.

Hence, regulatory reforms should affect collective bargaining practices in order to bring wages more in line with productivity changes. This requires giving more scope to firm-level bargaining, even for those firms within the coverage of industry-wide agreements, and limiting the use of wage indexation rules. As indicated in Section 5, the labor reforms of June 2010 and June 2011 did introduce eased the opt-out of industry agreements and established firm-level agreements as the default ones. However, by giving labor unions and the employers' association an effective veto over this change, it is not clear whether these changes will deliver a significant increase in the degree of decentralization.

We strongly believe that the SOEC and making opting-out of sectorial collective bargaining truly operational would eliminate the insider-outsider divide, and that this would bring very positive consequences in terms of job creation, giving scope to most-needed productivity gains and, last but not least, reducing earnings inequality among Spanish workers. The two fundamental measures that we advocate would surely need further refinements and being complemented by others geared towards reducing long-term unemployment, such as introducing some degree of experience-rating in unemployment benefits and improving the effectiveness of active labor market policies, by means of proper

evaluation of their effects with financial consequences for the agencies in charge of the administration of those policies.[25]

7 Conclusions

The Spanish economy is currently in a dire situation. Reducing the indebtedness of the private and public sectors is urgent, as external financial conditions are very unfavorable. As monetary policy, within the Monetary Union, is out of domestic control, and fiscal policy is constrained by the financial conditions, supply policies should take the most prominent role in the policy agenda. It is urgent to increase productivity growth, while at the same time creating jobs, so as to make the reduction of indebtedness less painful in terms of consumption, to domestically provide new funds for investment, and to restore the competitiveness lost since the access to the EMU.

Labor market reforms are key to restart productivity growth. We do not to believe that they are also sufficient, as there are many other areas in which structural reforms should be contemplated. Two important points that policy-makers need to consider are:

1. Labor market reforms and product market reforms ease the needed for fiscal consolidation process (see Gavilán *et al.*, 2010). Reducing the insider-outsider divide and lowering barriers to competition in the product market would substantially increase job creation and productivity growth, so that fiscal revenues would be larger and public deficits and debt could be further reduced with a lower cost in terms of consumption.

2. Be aware of reform fatigue. As shown above, there have been far too many unsuccessful and contradictory labor market reforms. The new labor market reform will have to be implemented in the context of a very intense fiscal retrenchment, and with the public opinion being very critical of the poor management of the consequences of the crisis so far. In this context, it is crucial that the reform has clear goals, be communicated clearly to the public opinion, and being perceived as equitable.

The task is not easy, but its time has come.

[25] See Andrés *et al.* (2009) for other proposals.

References

[1] Andrés, J. *et al.* (2009), "Propuesta para la reactivación laboral en España" (2009), *El País*, 26 April ("A Proposal to Restart the Spanish Labor Market", crisis09.es/PDF/restart-the-labor-market.pdf).

[2] Arpaia, A. and N. Curci (2010), "EU Labour Market Behaviour during the Great Recession", European Economy - Economic Papers 405, Directorate General Economic and Monetary Affairs, European Commission.

[3] Banco de España (2010), "Encuesta Financiera de las Familias (EFF) 2008: Métodos, resultados y cambios desde 2005", *Boletín Económico*, Banco de España, December.

[4] Bean, C. R. (1998), "The Interaction of Aggregate-Demand Policies and Labour Market Reform", *Swedish Economic Policy Review* 5, 353-382.

[5] Bentolila, S., P. Cahuc, J. J. Dolado, and T. Le Barbanchon (2011), "Two-Tier Labor Markets in the Great Recession: France vs. Spain", mimeo, CEMFI.

[6] Bentolila, S. and J. J. Dolado (1994), "Labour Flexibility and Wages: Lessons from Spain", *Economic Policy* 18, 53-99.

[7] Bentolila, S., J. J. Dolado, and J. F. Jimeno (2008), "Two-Tier Employment Protection Reforms: The Spanish Experience", *CESifo DICE Report* 4/2008.

[8] Bentolila, S. and J. F. Jimeno (2006), "Spanish Unemployment: The End of the Wild Ride?", in M. Werding (ed.), *Structural Unemployment in Western Europe. Reasons and Remedies*, MIT Press, Cambridge, MA.

[9] Bentolila, S., J. Jimeno and M. Izquierdo (2010), "Negociación colectiva: La gran reforma pendiente", *Papeles de Economía Española* 124, 176-192.

[10] Bertola, G (2010a), "Labour Markets in EMU: What Has Changed and What Needs to Change", in M. Buti, S. Deroose, V. Gaspar, and J. Nogueira Martins (eds.), *The Euro: The First Decade*, Cambridge University Press, Cambridge, 715-758.

[11] Bertola (2010b), "Fiscal Policy and Labor Markets at Times of Public Debt", *Nordic Economic Policy Review* 1/ 2010, 111-147.

[12] Blanchard, O. J. and A. Landier (2002), "The Perverse Effects of Partial Labor Market Reform: Fixed Duration Contracts in France", *Economic Journal* 112, 214-244.

[13] Blanchard, O. and L. Summers (1986), "Hysteresis and the European Unemployment Problem", *NBER Macroeconomics Annual*, vol. 1, MIT Press, Cambridge, MA, 15-77.

[14] Blanchard, O. J. and J. Tirole (2003), "Contours of Employment Protection Reform", MIT Department of Economics Working Paper 03-35.

[15] Boeri (2011), "Institutional Reforms and Dualism in European Labor Markets", in O. Ashenfelter and D. Card (eds.), *Handbook of Labor Economics*, Vol. 4b, North Holland, Amsterdam, 1173-1236.

[16] Boeri T. and P. Garibaldi P. (2008), *Un Nuovo Contratto per Tutti*, Chiarelettere, Torino.

[17] Burda, M. and J. Hunt (2011), "What Explains the German Labor Market Miracle in the Great Recession?", IZA Discussion Paper 5800.

[18] Cahuc. P. and F. Kramarz (2004), *De la précarité à la mobilité, vers une sécurité sociale professionnelle,* Rapport pour le Ministre de l'Economie et des Finances, La documentation Française, available at ladocumentationfrancaise.fr/rapports-publics/054000092/index.shtml

[19] Cahuc, P. and F. Postel-Vinay (2002), "Temporary Jobs, Employment Protection and Labor Market Performance", *Labor Economics* 9, 63-91.

[20] Carrasco, R., J. F. Jimeno, and A. C. Ortega (2011), "The Effect of Immigration on the Labor Market Performance of Native-Born Workers: Some Evidence for Spain", *Journal of Population Economics* 21, 627-648.

[21] Casado, J.M., C. Fernandez-Vidaurreta, and J. F. Jimeno (2011): "Labour Market Flows in the European Union", mimeo, Banco de España.

[22] Conde Ruiz, J. I., F. Felgueroso, and J. I. García Pérez (2011), "Reforma Laboral 2010: Una primera evaluación y propuestas de mejora", Fedea Working Paper 01-2011.

[23] Costain, J., Juan F. Jimeno, and Carlos Thomas (2010), "Employment Fluctuations in a Dual Labor Market", Banco de España Working Paper 1013.

[24] Dolado, J., F. Felgueroso, and M. Jansen (2010), "El conflicto entre la demanda de flexibilidad laboral y la resistencia a la reforma del mercado de trabajo en España", *Papeles de Economía Española* 124, 84-97.

[25] Dolado, J. J., C. Garcia-Serrano, and J. F. Jimeno (2002), "Drawing Lessons From The Boom of Temporary Jobs In Spain", *Economic Journal* 112, F270-F295.

[26] Duval, R. and J. Elmeskov (2005), "The Effects of EMU on Structural Reforms in Labour and Product Markets", OECD Economics Department Working Paper 438.

[27] Dolado, J. J., S. Ortigueira and R. Stucchi (2011), "Work Practices in a Two-tier Labour Market: Does the Firing-cost Gap affect TFP Growth in Spanish Manufacturing Firms?", mimeo, Universidad Carlos III.

[28] European Comission (2011): "Labour Market Developments in Europe, 2011", *European Economy* 2/2011. Directorate-General for Economic and Financial Affairs, European Commission.

[29] García Pérez, J. I. and V. Osuna (2011), "The Effects of Introducing a Single Open-ended Contract in the Spanish Labour Market", mimeo, Universidad Pablo de Olavide.

[30] García Pérez, J. I. and Y. F. Rebollo Sanz (2009), "Do Wage Subsidies Affect the Subsequent Employment Stability of Permanent Workers?: The Case of Spain", *Moneda y Crédito* 228, 65-102.

[31] Gavilán, A., P. Hernández de Cos, J.F. Jimeno, and J.A. Rojas (2011): "Fiscal Policy, Structural Reforms and External Imbalances: A Quantitative Evaluation for Spain", Banco de España, Working Paper 1107.

[32] Høj, J., V. Galasso, G. Nicoletti, and T.-T. Dang (2006), "The Political Economy of Structural Reform", OECD Economics Department Working Paper 501.

[33] Ichino, P. *et al.* (2009), "Disegno di Legge per la Transizione a un Regime di Flexicurity, n. 1481", 25 March.

[34] International Monetary Fund (2010), *World Economic Outlook. Rebalancing Growth,* April.

[35] Jimeno, J.F. and C. Thomas (2011), "Collective Bargaining, Firm Heterogeneity and Unemployment", mimeo, Banco de España.

[36] Jimeno, J.F. and L. Toharia (1996), "Effort, Absenteeism, and Fixed Term Employment Contracts", *Revista Española de Economía*, 13, 105-119.

[37] Lazear, E.(1990), "Job Security Provisions and Employment", *Quarterly Journal of Economics*, 105, 699-726.

[38] Lindbeck, A. and D. J. Snower (1984), "Involuntary Unemployment as an Insider-Outsider Dilemma", Institute for International Economic Studies Seminar Paper 309.

[39] Lindbeck, Assar, and Dennis J. Snower (1988), *The Insider-Outsider Theory of Employment and Unemployment*, MIT Press, Cambridge, MA.

[40] Mortensen, D. T. and C. A. Pissarides (1994), "Job Creation and Job Destruction in the Theory of Unemployment", *Review of Economic Studies* 61, 397-415.

[41] Saint-Paul, G. (2000), *The Political Economy of Labour Market Institutions*, Oxford University Press, Oxford.

[42] Saint-Paul, G. (2002), "Macroeconomic Fluctuations and the Timing of Labour Market Reforms", CEPR Working Paper 3646.

[43] Visser, J. (2011), "ICTWSS: Database on Institutional Characteristics of Trade Unions, Wage Setting, State Intervention and Social Pacts in 34 countries between 1960 and 2007", Version 3, Amsterdam Institute for Advanced Studies (www.uva-aias.net/208).

Table 1. Accounting for unemployment changes during the Great Recession, 2008Q1-2009Q4 (%)

		US	Germany	Spain
Unemployment rate	$\Delta u/u$	6.1	-0.4	11.2
Output	$\Delta Y/Y$	-2.4	-5.4	-5.0
Productivity	$\Delta(Y/H)/(Y/H)$	6.0	-3.0	2.7
Hours/worker	$\Delta(H/N)/(H/N)$	-2.2	-2.6	1.8
Labor force	$\Delta LF/LF$	-0.1	-0.2	1.7

Notes: Log-points. Data for the US and Germany are from Burda and Hunt (2011). For Spain, data are from the Quarterly National Accounts (www.ine.es).

Table 2. Employment protection legislation reforms of specific aspects (% of total)

	Period	Years with reform	Flexibility increasing	Structural	Complete	Discrete
France	1982-2007	56	68	32	18	44
Germany	1985-2007	50	72	39	22	36
Italy	1982-2007	56	68	32	18	44
Average:		54	69	35	19	41
Spain	1980-2007	48	61	24	21	29
Versus			Decreasing	Marginal	Two-tier	Incremental

Source: Own computations with Fondazione Rodolfo DeBenedetti–IZA Social Reforms Database (www.frdb.org), see Boeri (2011).

Table 3. Attitudes towards labor market reform (% of respondents)

	Spain	EU15
Population 16 years old and over	61.2	71.2
• 16-24 years old	64.9	71.2
• 45-54 years old	60.1	69.4
• 55-64 years old	58.8	68.6
Employed (16-64 years old)		
• Expect to keep their jobs in near future	57.2	69.4
• Do not expect to keep their jobs in near future	61.7	70.0
Non-employed (16-64 years old)		
• Lost their jobs during the crisis	70.3	73.5
• Did not lose their jobs during the crisis	60.0	70.5
Current labor status (16-64 years old)		
• Self employed/Entrepreneurs	67.2	77.4
• Managers	62.2	68.5
• Salaried professionals	65.3	73.6
• Other skilled employees	51.0	67.3
• Low-skill employees	69.3	71.2
• Unemployed	69.6	72.6

Note: The table shows the percentage share of respondents who agree with the statement: "Work contracts should become more flexible to encourage job creation", Special Eurobarometer 316 (European Employment and Social Policy), May-June 2009 (ec.europa.eu/public_opinion/archives /eb_special_320_300_en.htm). Source: Dolado *et al.* (2010).

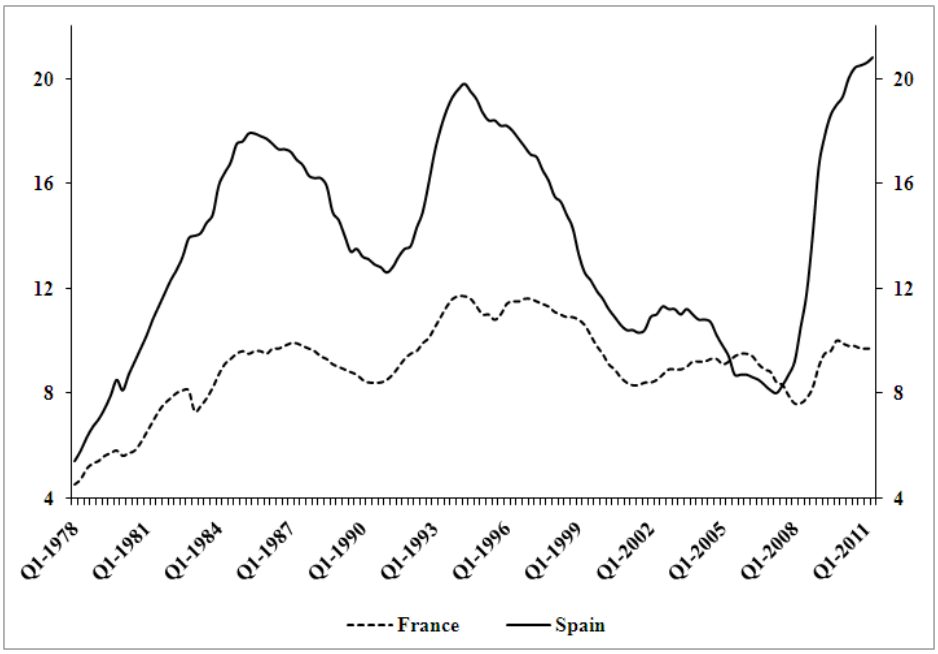

Figure 1: Unemployment rate in Spain and France (harmonised definitions, %)

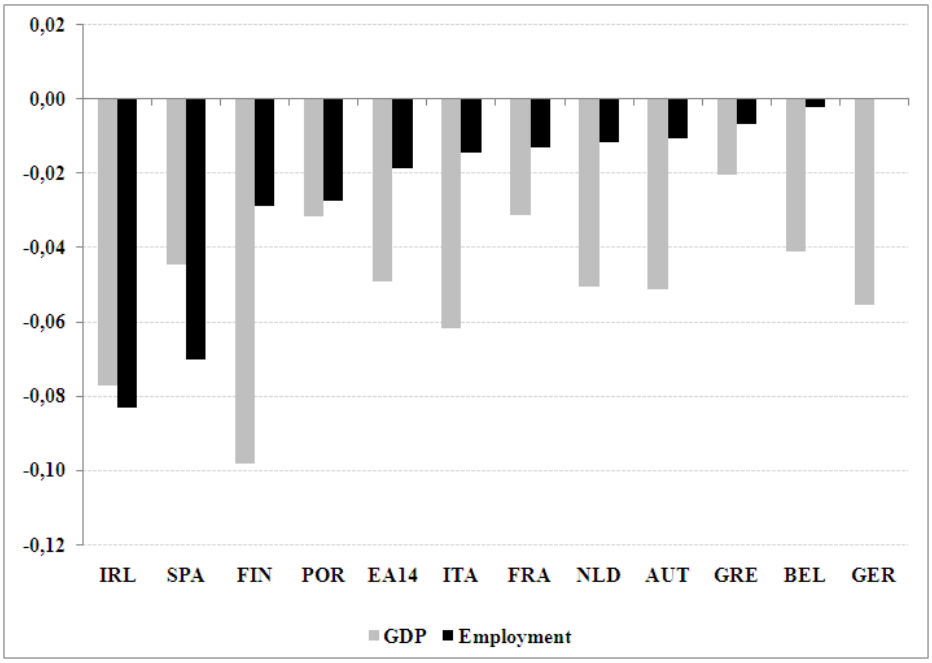

Figure 2: Fall in GDP and increase in the unemployment rate in selected countries (2008Q2-2009Q2)

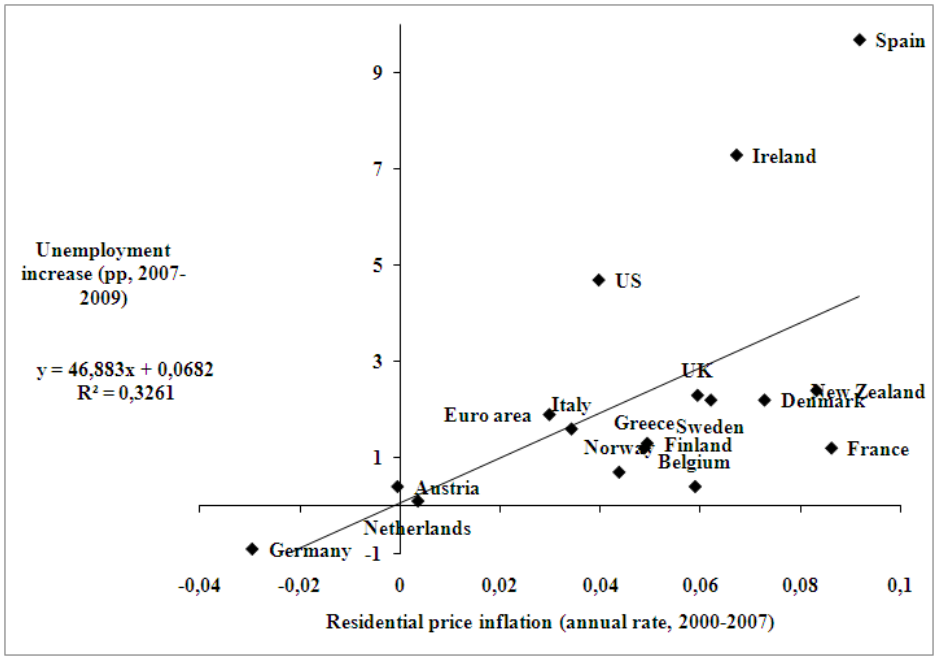

Figure 3: Unemployment change and residential price inflation in EU countries

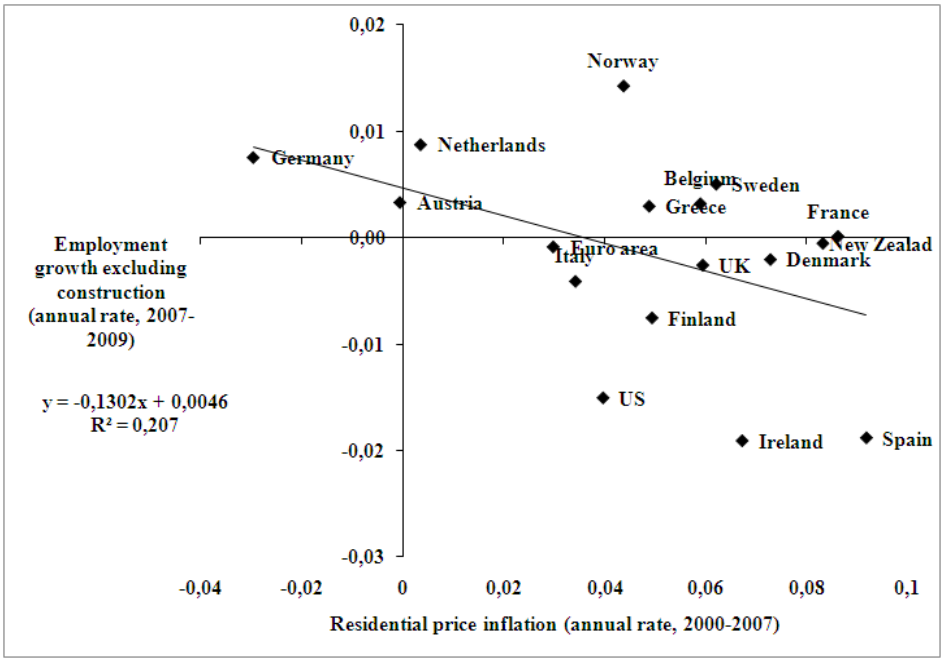

Figure 4: Employment growth (excluding construction) and residential price inflation in EU countries

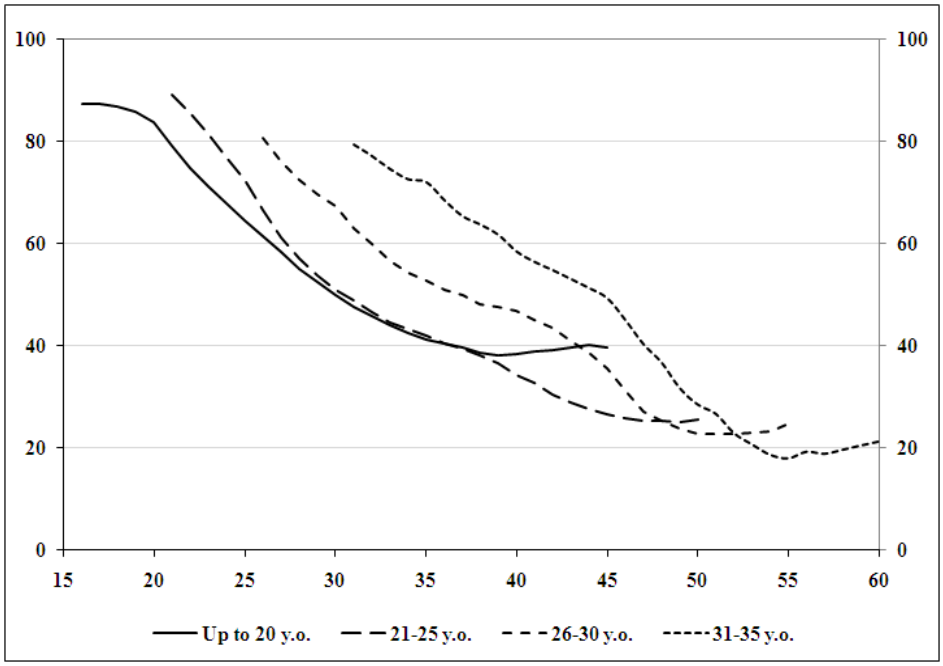

Figure 5: Remaining share of workers in temporary jobs by cohort (1990-2009)

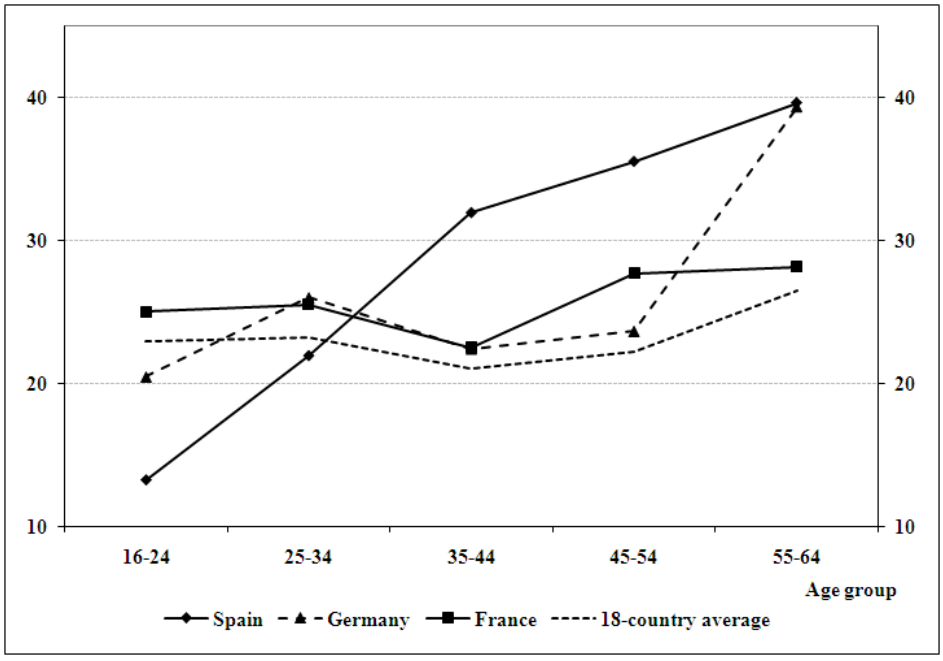

Figure 6: Perceptions of job insecurity by age group in Spain (%)

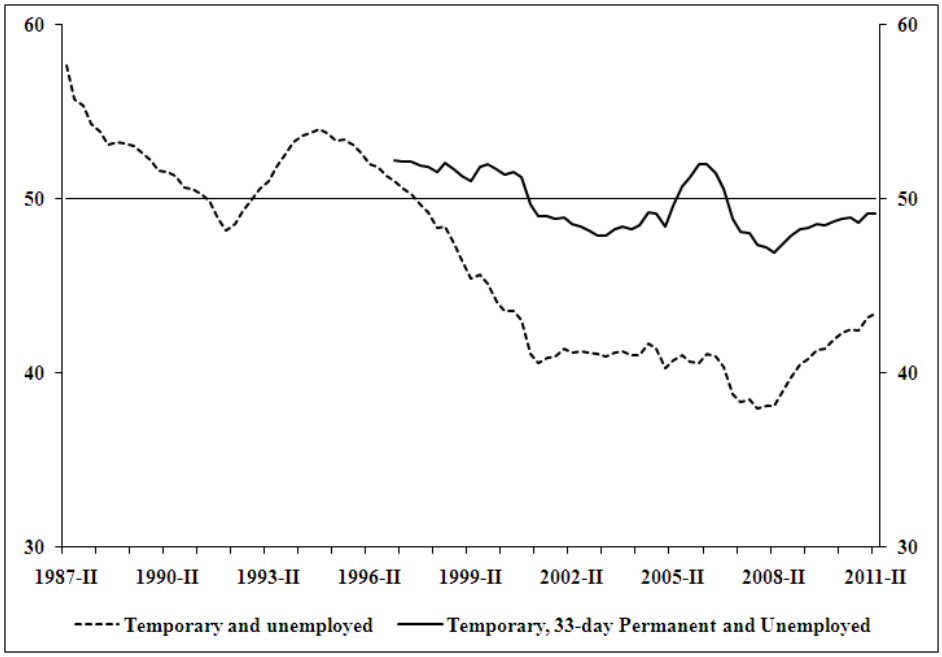

Figure 7: Outsiders as a share of employees and the unemployed in Spain (%)

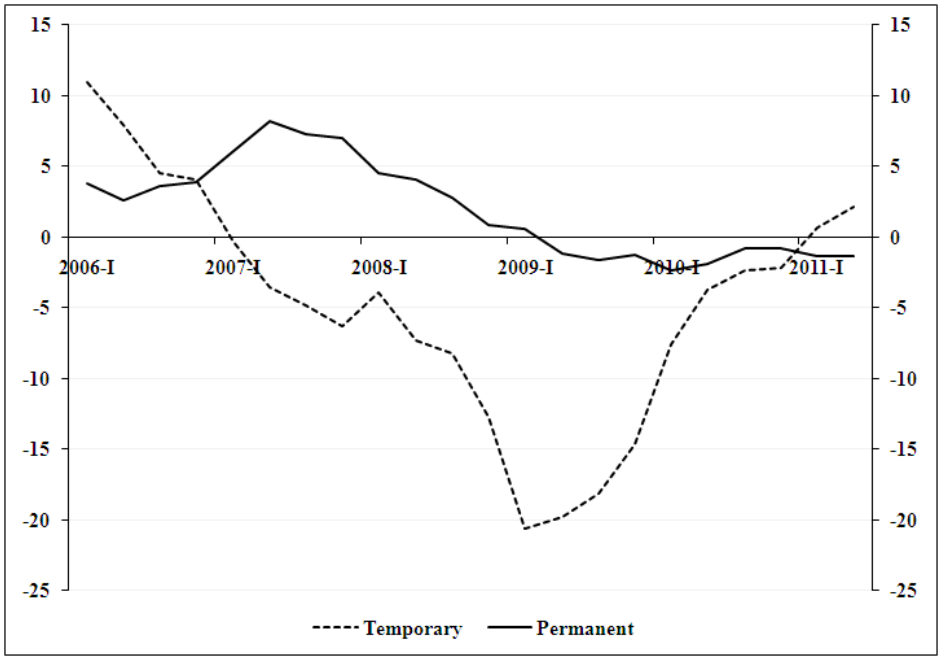

Figure 8: Permanent and temporary employment growth in Spain (annual change, %)

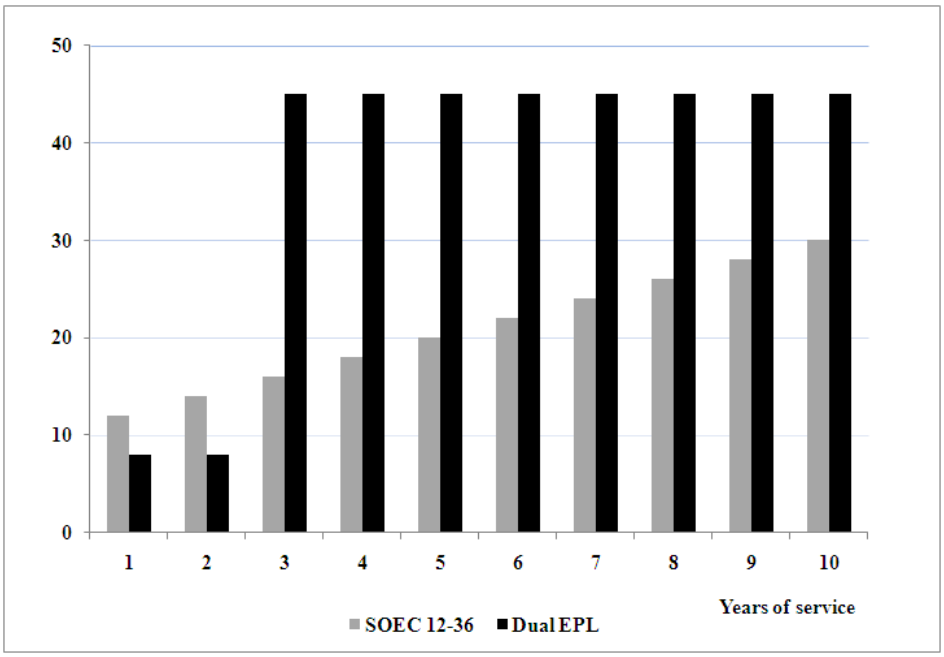

Figure 9: Marginal severance pay in dual EPL and in SOEC 12-36