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The Unbearable Divergence of Unemployment in Europe

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Abstract

Unemployment in Europe is not only “too high”, it is also too different across countries that belong to a monetary union. In this paper we i) document this increasing heterogeneity, ii) try to explain it and iii) draw from our diagnosis indications as to the appropriate set of policies to reduce unemployment and labour market disparities. Our analysis suggests that the divergence in labour market outcomes across Europe is the by-product of interactions between, on the one hand, shocks of varying size and nature, and, on the other hand, country-specific labour market institutions. We argue that EU policy coordination and conditionality during the Great Recession and the euro area debt crisis did not properly take into account these interactions. We also propose a change in the European policy approach for fighting unemployment.

Keywords: Okun’s Law, institutions, financial shocks

JEL codes: J3; J5

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1 Introduction

Unemployment in Europe, notably youth unemployment, is not only unbearably high, it is also unbearably different across nations that belong to an economic and monetary union. It is divergent across countries (more so than across regions), so that talking about a European unemployment problem or even more so a European structural unemployment problem is highly misleading.

In this paper we note that this heterogeneity cannot be accounted for only by the size or even by the nature of shocks experienced in the various countries. It is also largely unrelated to region-specific (and presumably sector-specific) evolutions within each country. The European unemployment divergence is largely to do with differences in labour market institutions across countries, notably the way in which these different institutions have reacted to shocks. Learning from these interactions between shocks and institutions is essential not only for devising structural reforms, but also for improving fiscal policy coordination in Europe.

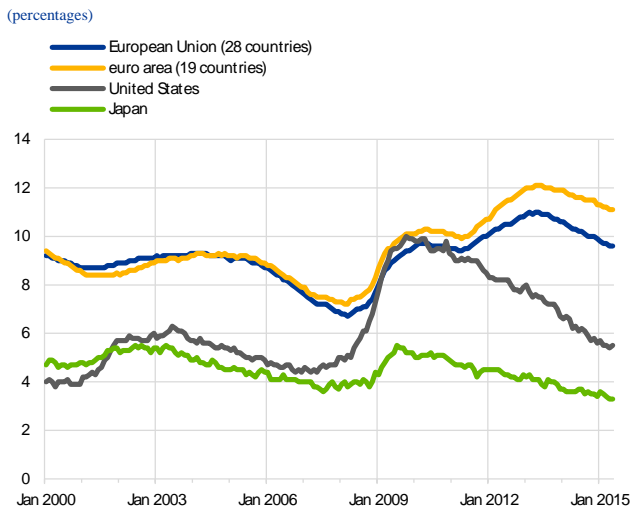
We argue that EU policy coordination and conditionality vis-à-vis highly indebted countries were poorly exerted during the Great Recession. On account of the incompleteness and the imperfection of economic and monetary union (EMU), there has been a lack of instruments to address the asymmetric effects of demand shocks across member countries. Even when some advances were made in the fiscal policy framework, too much emphasis was placed on the notion of structural unemployment, whether this was the non-accelerating wage rate of unemployment (NAWRU) or the non-accelerating inflation rate of unemployment (NAIRU). This turns out to be very risky since long-term trends and the long-lasting effects of the crisis on the relationships between macroeconomic variables make it more and more difficult to disentangle structural and cyclical unemployment, and, in fact, the several measures of structural unemployment, however defined, fluctuate too much over time to qualify as structural.

Admittedly, there have been some improvements in the policy coordination framework of the EU, but conditionality over countries, whether or not they were subject to formal rescue programmes, was poorly exerted. Some key reforms were lost in translation, while others were enforced without taking into account their effects over the business cycle.

We begin with some facts about country-specific unemployment trajectories and then move on to analyse the role played by institutions, shocks and the interactions between shocks and institutions in these trajectories. In this context, we look at outliers in Okun's relationship and introduce some new microeconomic evidence on how firms adjusted to different shocks that has come from a new wave of a survey of European firms across 25 countries, conducted by the ESCB's *Wage Dynamics Network*. The final sections draw policy implications from our analysis, substantiating our negative views of the policy responses to unemployment during the crisis, and motivating a proposal for changes to the European policy approach for fighting unemployment.

Chart 1a

Unemployment rates from 2000 to 2015: European Union, euro area, United States and Japan



Source: Eurostat.

Notes: EA-19 refers to the 19 countries of the euro area, while EU-28 denotes the 28 countries of the European Union.

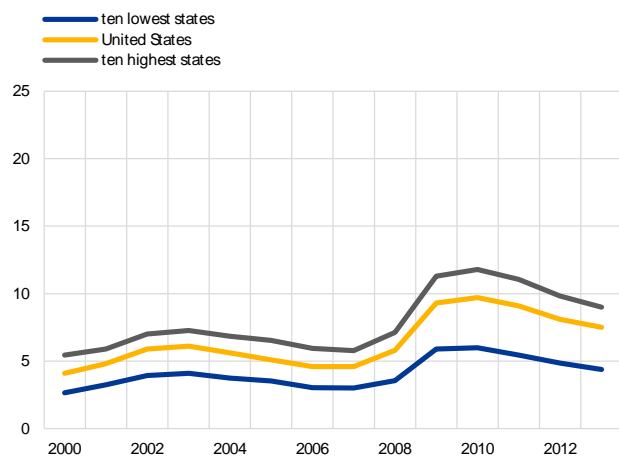
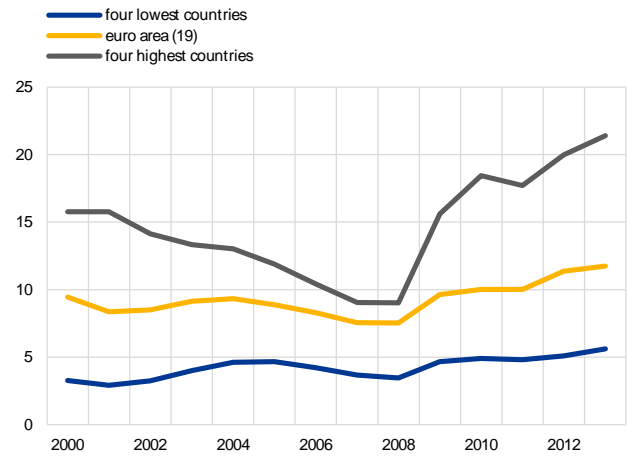
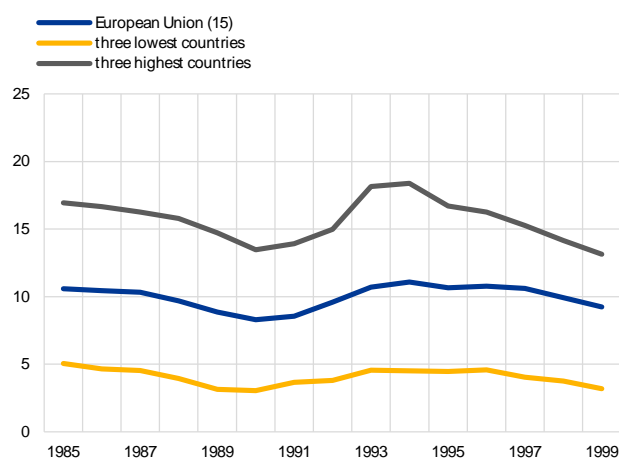
2.1 Some key facts

Throughout the Great Recession of 2008 and 2009, unemployment in the United States was consistently higher than in the European Union. Five years down the road from the global crisis, EU unemployment is almost twice as high as in the United States (Chart 1a). In the 19 countries of the euro area it is actually more than twice as high as it is on the other side of the Atlantic. In Europe, unemployment is not only stubbornly high, but it is also very unevenly distributed across countries and population groups. There is clear evidence that since 2007 the dispersion of unemployment rates within the euro area has increased much more than in previous recessions; the gap between the average unemployment rate of the four euro area countries with the highest unemployment rates and that of the four euro area countries with the lowest unemployment rates is more than 15 percentage points. A similar comparison in the United States, between the averages of the ten states with the highest and ten states with the lowest unemployment rates, yields a gap of less than 5 percentage points (Chart 1b).

Chart 1b

Cross-country (EU and euro area) and cross-state (United States) unemployment rates

(percentages)



Unlike the United States, Europe has not experienced a decline in participation rates, and, in fact, the level of labour supply in proportion to the working age population, which was higher in the United States than in Europe before the Great Recession, is now converging across the two sides of the Atlantic (Chart 2a). Also, in stark contrast with previous recessions, where soft-landing schemes to retirement were widely used by firms attempting to downsize, employment rates among older workers have actually increased in most European countries throughout the Great Recession and the euro area debt crisis (Chart 2b).¹

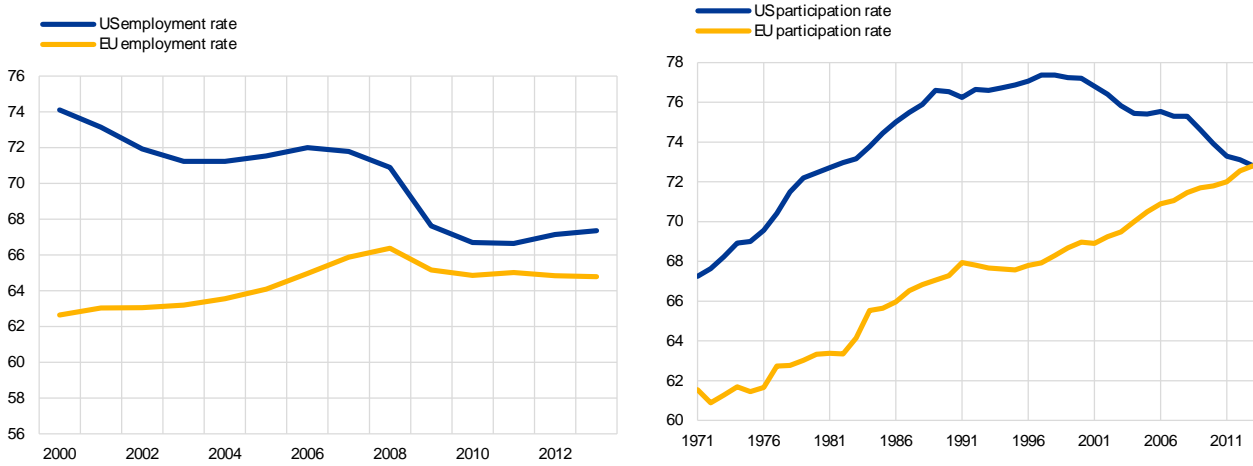
Sources: Eurostat and BLS.

¹ The convergence in European and US labour force participation rates for workers aged 15-64 should not hide large differences in the degree of mobilisation of labour supply among older workers. Employment rates for workers aged 65 or more are close to 20% in the United States and Japan, but lower than 10% in the EU. When the employment rate is computed for the population over 15 years of age, it is 8 percentage points higher in the United States than in the euro area.

Chart 2a

Employment and participation rates in Europe and the United States

(percentage of population aged 15-64)



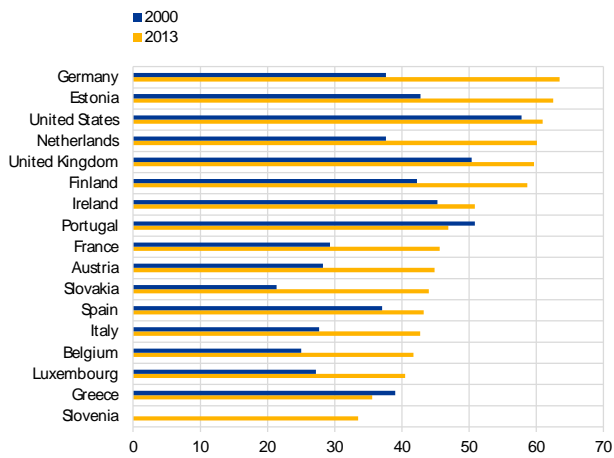
Source: Eurostat.

Note: Data for the EU include only 21 countries because for these variables there are no homogeneous long-time series available for the EU-28.

Chart 2b

Employment rates among older workers in 2000 and 2013

(percentage of population aged 55-64)



Source: Eurostat.

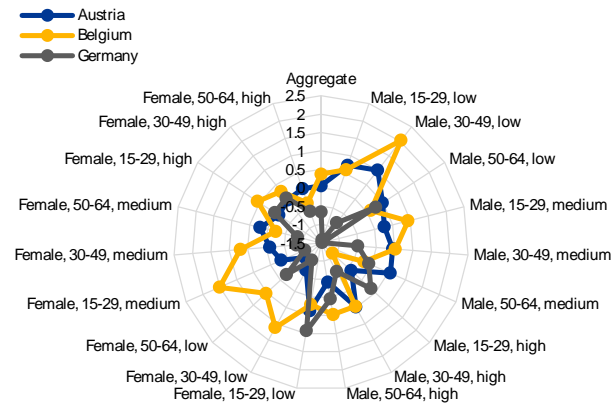
A main driver of European cross-country differences in unemployment is youth unemployment, which stands above (often well above) 40% in southern Europe while remaining at single-digit levels in Austria and Germany. As shown by Casado, Fernández-Vidaurreta and Jimeno (2015), during this recession job losses were highly concentrated among younger workers. Thus the explosion of youth unemployment was, unlike in previous recessions, not only related to a hiring freeze, but also to the heavy destruction of jobs held by young people, with the dissolution of temporary contracts, while at the same time employment rates among older workers were increasing (Chart 3).

Chart 3

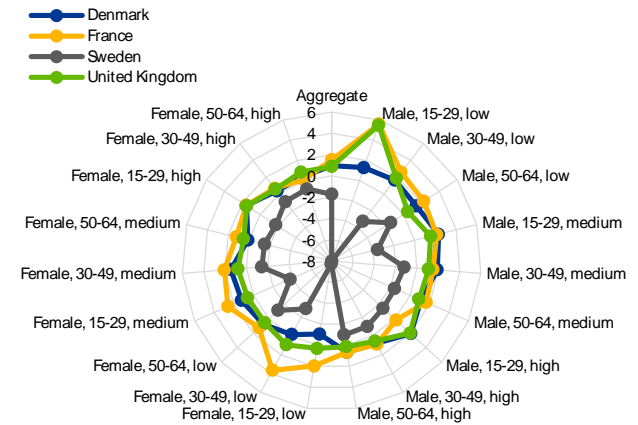
Changes in the probability of transiting between employment and unemployment between 2007 and 2012 for people of different ages, genders and education levels in various European countries

(annual flows in percentage points)

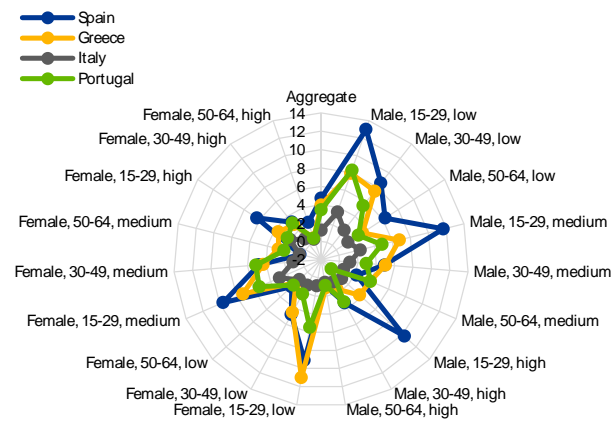
From employment to unemployment



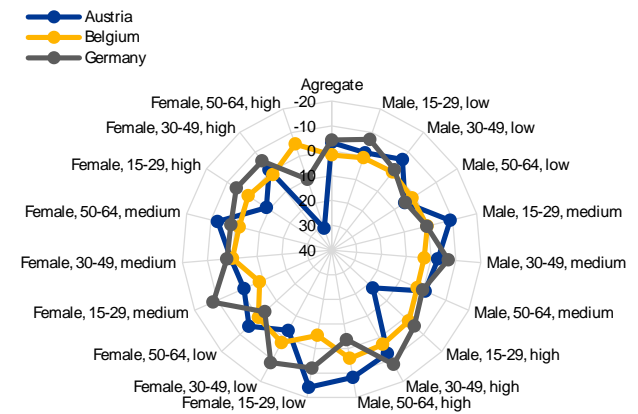
From employment to unemployment



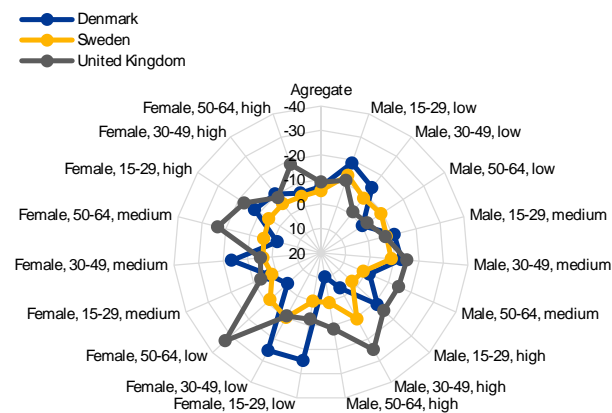
From employment to unemployment



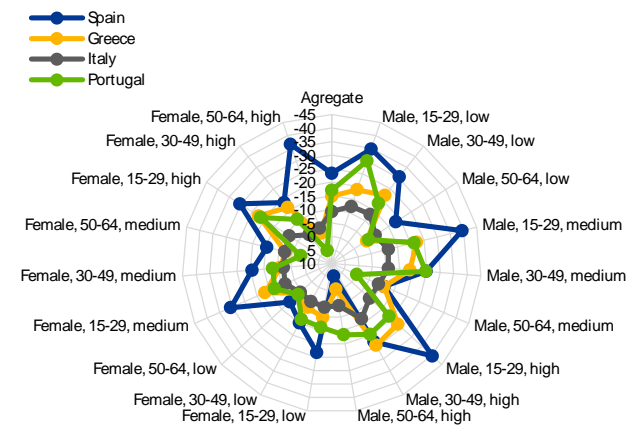
From unemployment to employment



From unemployment to employment



From unemployment to employment



Source: Authors' calculations on data from the European Labour Force Survey.

These two distinguishing features of labour market adjustment in Europe since the Great Recession – the cross-country heterogeneity in unemployment rates, notably among young people, and the increase in labour supply – appear therefore to be closely interrelated. We will now discuss whether they can be attributed to institutional features or to differences within and between countries in the intensity and characteristics of shocks.

2.2 Variation between countries vs. variation within countries

Some preliminary indications as to the role played by shocks and labour market institutions in these developments can be identified by disentangling evolutions between countries from those within countries as typically institutions vary more across rather than within countries while shocks tend to be concentrated on specific regions and sectors. Given the high concentration of increases in job destruction and decreases in job creation among the younger cohorts, we focus on youth unemployment to perform this decomposition.

In particular, we treat the EU as a single unit, and compute two well-known indexes of inequality (the Gini and the Theil indexes). They both show a noticeable increase in dispersion (inequality) of youth unemployment rates across EU regions throughout the Great Recession. The overall Theil index, for example, climbed from 13% in 2007 to 21% in 2013, an increase of eight percentage points. This regional dispersion can be broken down into variations within countries and between countries, according to the following formula²:

$$T = \underbrace{\sum_{k=1}^m \left(\frac{r_k \bar{u}_k}{r \bar{u}} \right) T_k}_{T_{within}} + \underbrace{\sum_{k=1}^m \left(\frac{r_k \bar{u}_k}{r \bar{u}} \right) \ln \left(\frac{\bar{u}_k}{\bar{u}} \right)}_{T_{between}}$$

The first component, T_{within} , expresses the weighted average of the Theil indexes of each subgroup of NUTS-2 regions, which is the dispersion rate of youth unemployment due to the variability within countries of youth unemployment rates at the regional level. The second component, $T_{between}$, captures inequality between EU countries, basically computing the Theil by using the countries' mean values of regional youth unemployment rates. As can be seen from Table 1, from 2007 to 2013 the $T_{between}$ increased from 8% to 18%. On the contrary, regional divergence within each country decreased, with a reduction in the T_{within} from 7% to 4%. Thus, the growing dispersion of European youth unemployment rates appears to have a marked national dimension. Similar qualitative results arise when performing this decomposition on the overall unemployment rates.

² The notation is as follows: m is the total number of EU Member States, r is the total number of NUTS-2 regions, r_k is the number of NUTS-2 regions in country k , \bar{u} is the average youth unemployment rate in the EU, \bar{u}_k is the average youth unemployment rate of NUTS-2 regions in country k and T_k is the Theil index of country k .

Table 1**Measures of dispersion of youth unemployment rates**

Regional dispersion of youth unemployment	2007	2013	Variation
EU regions (NUTS-2 level)			
Gini index	29%	37%	28%
Theil index (total)	13%	21%	58%
Theil within	7%	4%	-48%
Theil between	8%	18%	135%

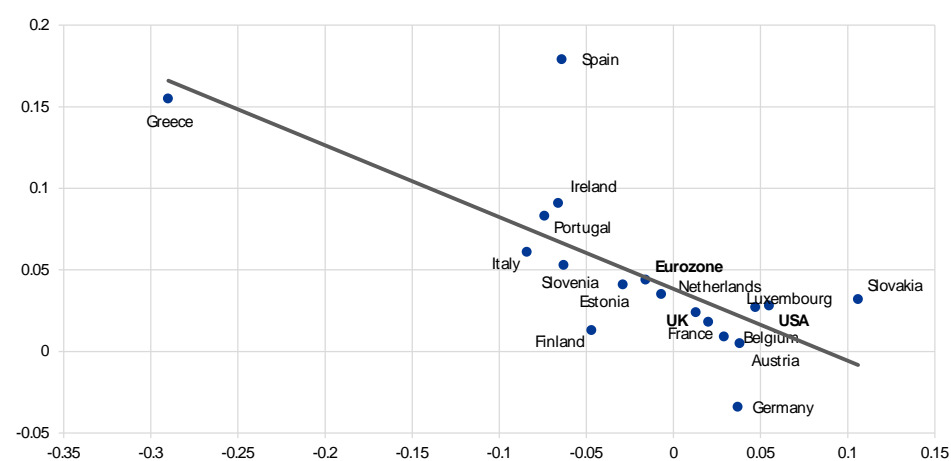
2.3 Okun in Europe

In addition to labour market institutions, national (as opposed to regional) differences in the size of macroeconomic shocks may have been responsible for the increasing cross-country divergence in unemployment rates.

A very crude way to assess the relative importance of institutions and shocks in unemployment dynamics is in terms of Okun's law elasticities. Deviations from the overall euro area elasticity can be attributed to labour market institutions, while different country positioning along the same unemployment-GDP or employment-GDP elasticity can be related to the magnitude of the macro shock. Needless to say, part of the output fall itself can be attributed to labour market institutions (in their role as sources of shocks or in the transmission mechanism of shocks generated elsewhere), but, with very few exceptions that we highlight below, during the Great Recession the effects of shocks generated in the labour market on output are relatively second order.

Chart 4**Accumulated variations in unemployment and output between 2007 and 2013**

(log-differences)

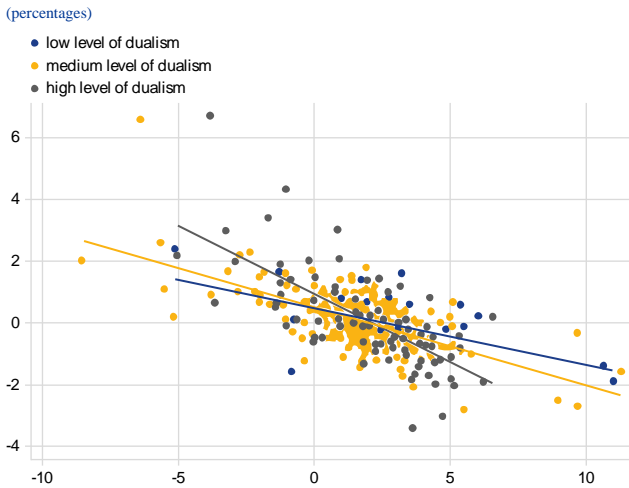


Sources: Authors' calculations on Eurostat and OECD data.

Note: The y-axis shows changes in unemployment rates and the x-axis shows the accumulated change in GDP throughout the period.

Chart 4 provides a visual representation of this admittedly rough decomposition. It plots the cumulated output (horizontal axis) and unemployment (vertical axis) variations over the period 2007-2013.³ The message is rather clear. Just over one-half of the variation (about 52%) in national unemployment rates is related to a different exposure to shocks per given beta coefficient. The cumulated growth rates in GDP during the period 2008-2013 range from almost -30% in Greece to more than +10% in Slovakia. Some features of the current crisis, from its different nature across countries (i.e. the presence and magnitude of housing bubbles in the pre-crisis period and the depth of financial markets) and the different policy responses (i.e. fiscal and external financing problems and bail-out issues), to the influence of the labour market in the transmission of fundamental shocks and lack of automatic stabilisers at the country level, explain the dispersion in GDP growth rates and, hence, in unemployment rates.

Chart 5
Unemployment responsiveness to output changes in countries with different degrees of dualism



Source: Authors' calculations on OECD data.
Note: GDP variation is shown on the x-axis, while variation in unemployment is shown on the y-axis.

The remaining 50% of the variation is not explained by GDP variation. As Chart 4 shows, there are some outliers in the relationship between GDP growth rates and unemployment variation: Spain and Germany, most notably (also Finland and Slovakia, to some extent). Labour market institutions and employment policies, mostly (but not only) by determining the degree of labour hoarding in response to shocks, are likely to be behind this residual source of unemployment divergence in the euro area during the Great Recession. The fact that Okun's coefficients turned out to be higher in countries with dual employment protection legislation (Chart 5) also confirms that cross-country differences in labour market institutions are important determinants of the divergence of unemployment in Europe.

A simple decomposition can offer additional clues as to the sources of these differences in Okun's coefficients and their relationships with labour market institutions. Given that $u \approx -\ln(e)$ where u denotes the unemployment rate, and e the ratio of employment (N) to the labour force (LF), we have

$$d \ln(N) = d \ln(Y) - d \ln(Y/H) - d \ln(H/N) \text{ with } Y \text{ being GDP and } H \text{ being hours worked.}$$

Then

$$du = -d \ln(Y) + d \ln(LF) + d \ln(Y/H) + d \ln(H/N) \tag{1}$$

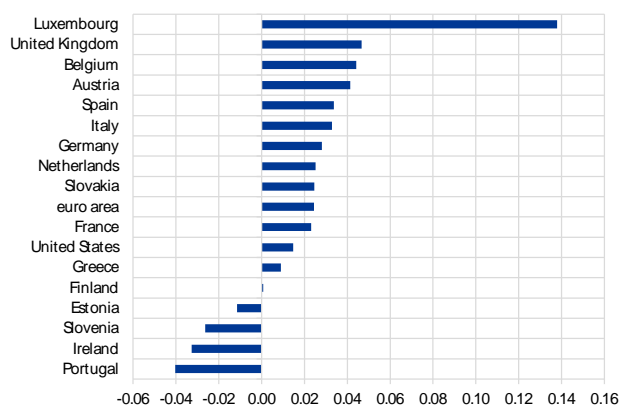
³ The regression line involves a beta coefficient of -0.44 (t-statistics: -4.19).

Chart 6

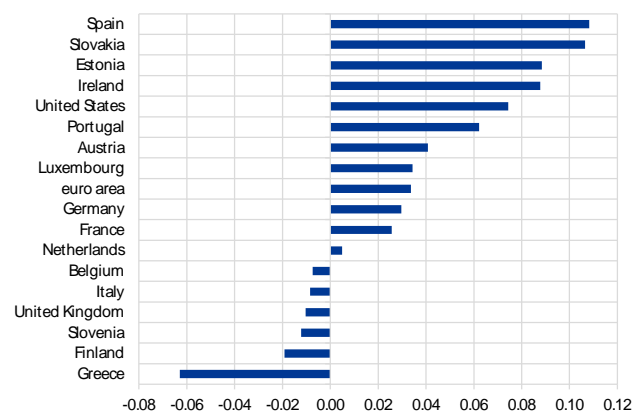
Role of intensive, extensive and participation margins in unemployment to output response (2007-2013)

(log-differences)

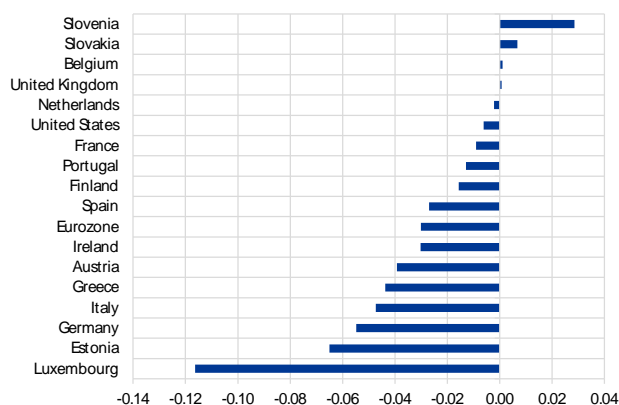
Change in the labour force



Change in output per hour worked



Change in working hours per worker



Hence, the Okun's ratio $du/d\ln(Y)$ can be decomposed into a component related to the participation margin, a component related to productivity (per hour worked), and a component related to the intensive margin (hours worked per employee).⁴ Clearly, EU countries behaved very differently in the way these three components accommodated the response to negative demand shocks (Chart 6). This heterogeneity in the use of intensive and extensive margins also points to the role played by labour market institutions during the Great Recession and the euro area crisis.

Source: Authors' calculations on Eurostat and OECD data.

2.4 Some new microeconomic evidence on the nature of shocks

Okun's law coefficients control for the size of the aggregate shock, but they are silent on its nature, duration, sources and differential incidence across sectors and firms. Microeconomic evidence about sources of shocks to firms and their corresponding responses, in terms of employment, wages, hours worked and other adjustment mechanisms, is provided by an ESCB research network (the Wage Dynamics Network, WDN), which has conducted ad hoc surveys on firms. Its most recent wave, covering 25 European countries, was used to measure firms' perceptions of the nature of shocks driving the Great Recession, responses to those shocks and the constraints imposed by labour market institutions on those responses.

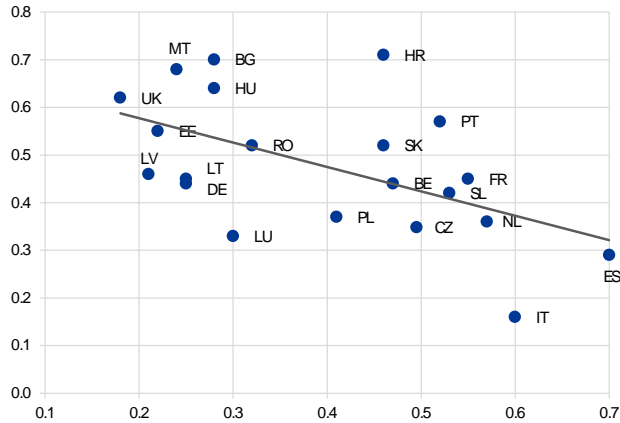
⁴ We take OECD data for GDP, unemployment rate, labour force and GDP per hour worked and obtain hours worked per worker as the residual of the equation (1).

At the time of writing this paper, only very preliminary third-wave data from the WDN (and not for all countries that performed the survey) are available.⁵ Nevertheless, some interesting patterns, which will be further investigated when the whole dataset is compiled and harmonised, are emerging.

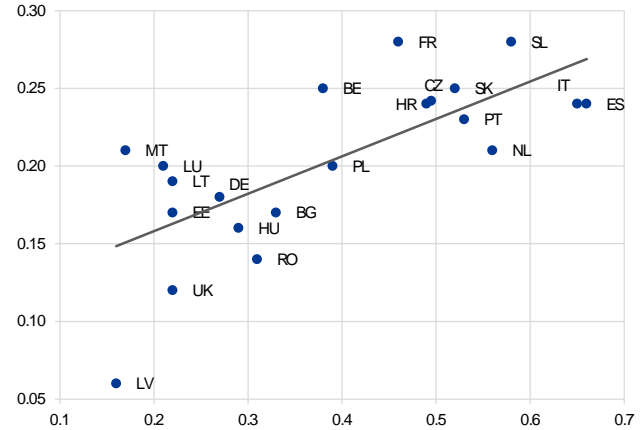
Chart 7

Sources of shocks between 2010 and 2013 according to firms' perceptions

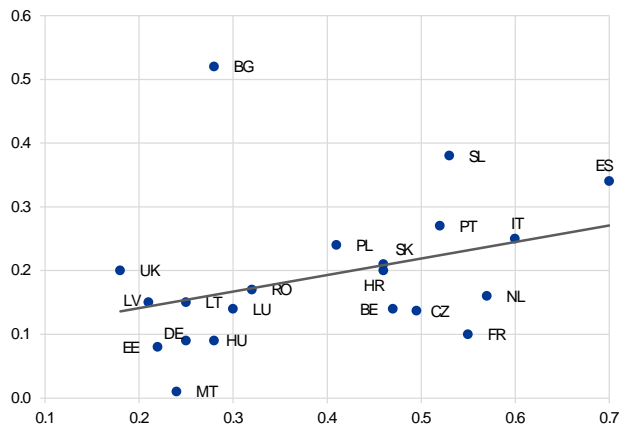
(x-axis: percentage of firms with a decrease in demand; y-axis: percentage of firms with permanent effects of lower demand)



(x-axis: percentage of firms suffering a decrease in domestic demand; y-axis: percentage of firms suffering a decrease in foreign demand)



(x-axis: percentage of firms with a decrease in demand; y-axis: percentage of firms claiming debt refinancing problems as relevant)



Source: Third wave of the *Wage Dynamics Network Survey*.
Note: Data are third-wave WDN survey results and as such are very preliminary data.

First, as shown in Chart 7, there is a wide cross-country heterogeneity in the nature of the shocks, as reflected in the proportion of firms declaring that decreasing demand and financial problems were relevant or very relevant during the period 2010-2013. There are also noticeable cross-country differences in the duration of the negative demand shock, being perceived by firms as less permanent in those countries where more firms were experiencing decreasing demand. Across countries, there is also a positive association between the domestic and the foreign components of the fall in demand. The likelihood of a lack of finance being perceived as relevant by firms is also positively associated to the perception of a fall in demand.

As for the responses to these shocks, there is a clear positive association between the proportion of firms suffering a decrease in demand, and the proportion of firms declaring that their base wages did not change during the 2010-2013 period (Chart 8a). A similar cross-country positive association is also observed with regard to the incidence of debt refinancing problems. This suggests that wage reductions could have been a way for liquidity-constrained firms to borrow from workers.⁶ Also, given the magnitude of the demand and financial shocks, downward nominal wage rigidity seems to be more binding in southern European

⁵ We are grateful to participants of the WDN network for allowing us to use these preliminary data, and to Samuel Skoda for his help in computing the statistics presented below.

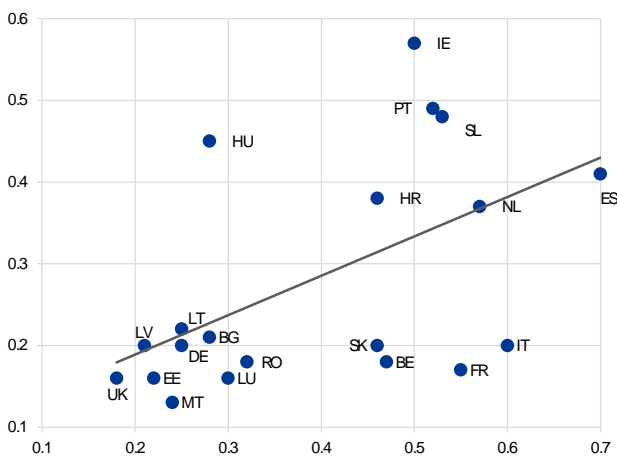
⁶ There is also evidence to suggest that credit-constrained firms increased markups as a way of raising internal funds (see Montero and Urtasun, 2014, and Gilchrist et al., 2015).

countries (France, Spain and Italy) than in eastern European countries (Slovenia, Latvia and Estonia) where internal devaluations took place in a less gradual fashion. Finally, in those countries where downward nominal wage rigidity was more binding, employment adjustments were more prevalent with significant differences between temporary and permanent employment in countries with dual employment protection legislation (Spain and Italy) and with fewer firms reducing employment in countries, such as Germany, that could rely mostly on other margins of adjustment (Chart 8b).

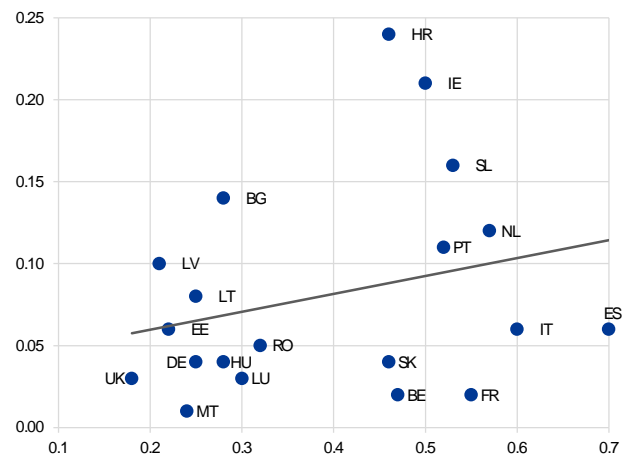
Chart 8a

Wage responses to shocks between 2010 and 2013

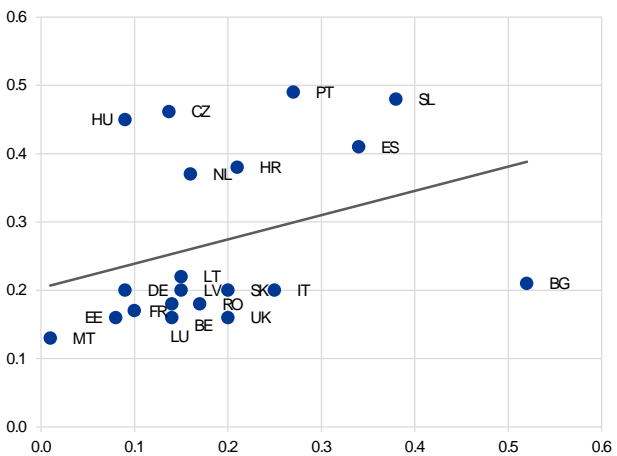
(x-axis: percentage of firms with a decrease in demand; y-axis: percentage of firms with unchanged wages)



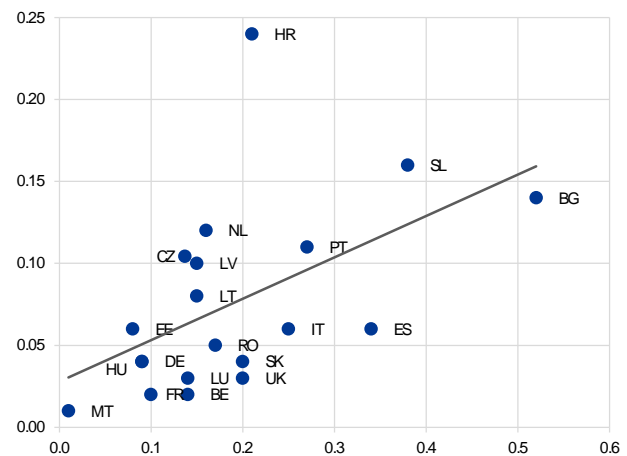
(x-axis: percentage of firms with a decrease in demand; y-axis: percentage of firms with lowered wages)



(x-axis: percentage of firms with worsening access to financing firm's activity; y-axis: percentage of firms with unchanged wages)



(x-axis: percentage of firms with worsening access to financing firm's activity; y-axis: percentage of firms with lowered wages)

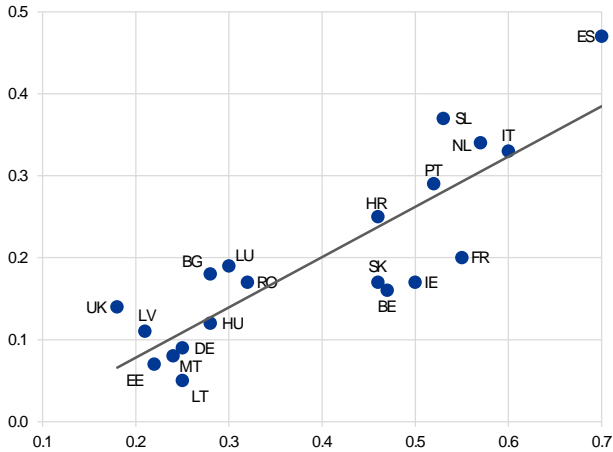


Source: Third wave of the *Wage Dynamics Network Survey*.
 Note: Data are third-wave WDN survey results and as such are very preliminary data.

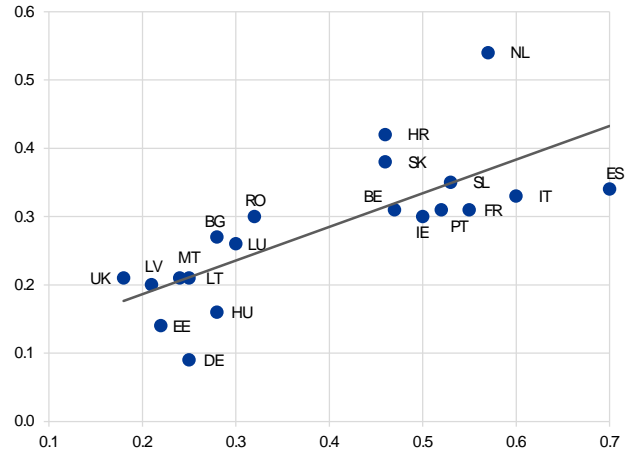
Chart 8b

Employment responses to shocks from 2010 to 2013

(x-axis: percentage of firms with a decrease in demand; y-axis: percentage of firms reducing temporary employment)



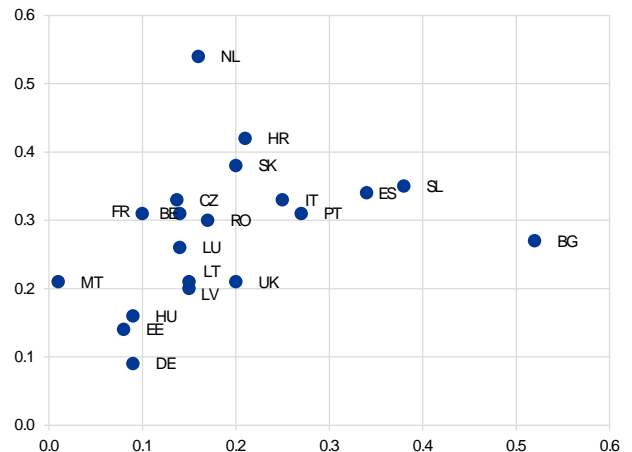
(x-axis: percentage of firms with a decrease in demand; y-axis: percentage of firms reducing permanent employment)



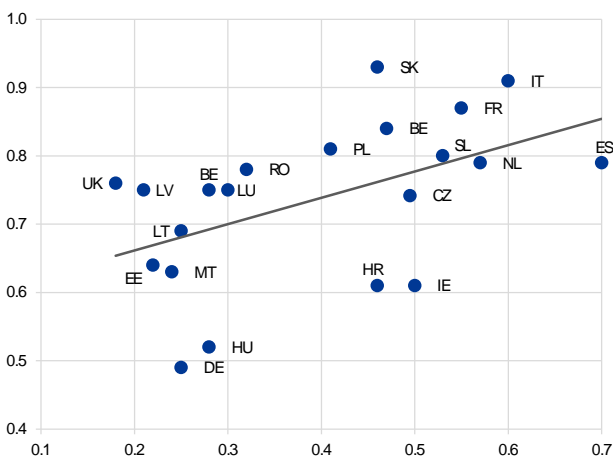
(x-axis: percentage of firms with worsening access to financing firm's activity; y-axis: percentage of firms reducing temporary employment)



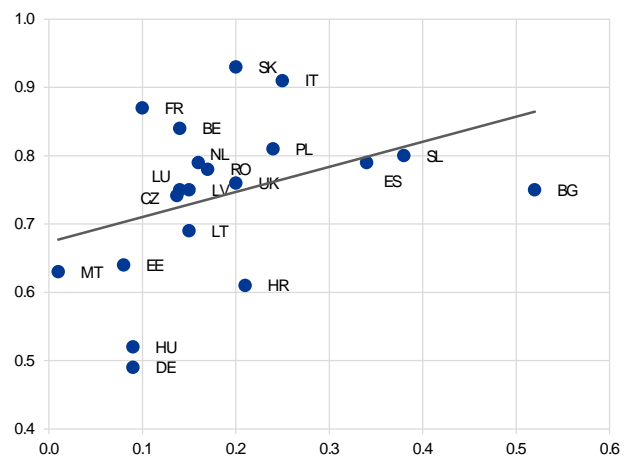
(x-axis: percentage of firms with worsening access to financing firm's activity; y-axis: percentage of firms reducing permanent employment)



(x-axis: percentage of firms with a decrease in demand; y-axis: percentage of firms freezing new hires)



(x-axis: percentage of firms with worsening access to financing firm's activity; y-axis: percentage of firms freezing new hires)



Source: Third wave of the *Wage Dynamics Network Survey*.
Note: Data are third-wave WDN survey results and as such are very preliminary data.

Hence, micro data suggest that differences in the characteristics of the demand and financial shocks hitting EU countries during the euro area crisis involved different adjustment mechanisms. While some countries seem to have had in place the proper institutions to deal with the shocks – Germany, for instance, could respond to a temporary shock by adjusting working hours – others were in a more difficult position, having to deal with permanent shocks, while also facing a credit crunch, implying a large reallocation of resources, and with labour market institutions not very likely to facilitate the needed adjustment.

2.5 Institutions and shocks: learning from outliers

The above macro and micro evidence points to relevant interactions between shocks and institutions (Blanchard and Wolfers, 2002) that have yet to be fully understood. The role of these interactions can be characterised by considering the two key outliers in the Okun's relationship, notably Germany and Spain. Without a doubt, the two countries faced shocks of different intensities and natures. Yet the asymmetry in the labour market response is quite striking. While in Germany adjustment along the intensive margin reduced the response of unemployment to the output fall, in Spain it is the decline in labour hoarding (a rise in productivity) together with a slight increase in participation and an initial increase in hours worked per employee that explains the rise in the unemployment rate.

This comparison between Germany and Spain highlights the fact that three labour market institutions have been particularly important with regard to the characteristics of the macroeconomic adjustment observed in EU countries: i) subsidised short-time work, ii) the decentralisation of collective bargaining, and iii) dualism in employment protection legislation (EPL).

2.5.1 Subsidising reductions in working hours

Germany activated a variety of instruments concentrated on the intensive margin in its adjustment to the Great Recession. First, it increased the scope of subsidised short-time work. Second, it used working-time accounts, essentially a scheme allowing firms to borrow from their employees. Rather than being paid for overtime worked, the employees earned the right to work fewer hours at a later stage. Third, there was yet another margin of adjustment: the introduction of mini-jobs increased the scope of multiple job holdings in Germany and this helped to prevent outright unemployment for many workers in the event of the loss of a primary (or secondary) job.

Spain did not activate any such schemes. As a matter of fact, while in most OECD countries hours per worker reduced during the Great Recession, in Spain hours worked per employee actually increased between 2008 and 2010 (see Bentolila, Dolado, and Jimeno, 2012).

2.5.2 Decentralising bargaining

Germany decentralised wage setting in the early 1990s and was a pioneer in the introduction of “exit clauses”. It could therefore use plant-level “pacts for employment and

competitiveness” to enable wage reductions rather than collective dismissals. At least up to 2011, collective bargaining institutions in Spain were instead imposing wages established at “higher” (provincial or sectoral) levels to lower bargaining structures, i.e. plant-level bargaining. This de facto prevented wage concessions being traded for more employment security as in the agreements signed in Germany at the company level.

This lack of adjustment of hours and wages to negative shocks in countries with two-tier bargaining structures is well documented in previous waves of the WDN survey, in which firms were asked whether they would reduce labour costs by cutting hours, wages (either the base wage or bonuses) or employment (either temporary contracts or permanent contracts). The firms applying plant-level agreements on top of multi-employer ones adjusted employment more than wages or hours in response to adverse shocks, unlike firms where there was no collective bargaining at all. In fact, about 60% of firms involved in the two bargaining levels adjusted mainly employment, just as firms involved only in multi-employer bargaining did. Firms where bargaining presumably takes place only at the individual level instead adjusted mainly wages in response to adverse shocks. These findings are robust to controls for country, sector and size of firms. This suggests that plant-level bargaining in two-tier regimes is inefficient in that it does not allow wage concessions to be traded for employment security, as in the case of stand-alone plant-level bargaining, concentrating all the adjustment on the extensive margin (Boeri, 2015).

2.5.3 Dual employment protection legislation

Spain is the land of dual EPL, that is, the coexistence of two different segments in the labour market: employees with open-ended contracts and employees with temporary contracts. This coexistence generates larger fluctuations in employment than those observed in fully flexible labour markets (see Chart 5). Countries with a higher contractual dualism display stronger responsiveness of unemployment to output changes. The reason for this role of contractual dualism is that employers do not have to pay costs, even in terms of severance payments, to dismiss temporary workers as they can simply wait until contract termination and not renew their contract. Moreover, the very fact that all the adjustment is concentrated on temporary employment de facto insulates workers holding permanent contracts from the consequences of negative shocks.⁷ Large job losses in the temporary worker segment may well coexist with wage rises among the permanent contract segment. Something similar happened in the Spanish construction sector during the first phase of the Great Recession (2008-2010); while about one-third of jobs on *contratos temporales* were destroyed, workers holding permanent contracts continued to enjoy real wage increases. Needless to say, there is something fundamentally wrong with a labour market operating in this way.

3 What went wrong

Let us summarise the evidence produced so far. High and unevenly distributed unemployment in Europe is not only the consequence of asymmetric shocks. It is true that

⁷ On the dynamics of employment under dual EPL see Boeri (2010) and Costain, Jimeno, and Thomas (2010).

shocks were of varying intensity and nature across countries, but even after controlling for these differences, the labour market responses appear to have been different across countries. Some countries used the intensive margin of labour market adjustment more, while others concentrated their response on the extensive margin. Some countries had bargaining structures that allowed for nominal wage cuts preventing mass lay-offs, while others could not use wage reductions as an alternative to dismissals. These institutional differences, in a context where the inactivity margin was not used – the labour supply of older workers was increasing, unlike in previous recessions – turned out to be very important in the differential rise in unemployment. Another important factor was labour market segmentation between temporary and permanent contracts, allowing wage increases to coexist with large employment losses, even within the same sector.

This does not mean that policies aimed at bringing unemployment down should only address these institutional failures, learning from the best (and worst) performers, and forgetting about aggregate demand management. It only means that greater attention should be paid to the interaction between macroeconomic policies and institutions. Aggregate demand management should be better synchronised with institutional reforms if the task is to avoid excessive employment destruction. The optimal design of institutions is not independent of the underlying cyclical conditions. Some badly needed institutional reforms aimed at restoring competitiveness can have undesirable effects in severe downturns, and stabilisation policies can reduce the risk of these reforms backfiring. At the same time, labour market institutions themselves may have to be designed in such a way as to have counter-cyclical properties, and this requires giving some fiscal leeway to countries in a monetary union hit by asymmetric shocks.

In this section we first evaluate what appear to be the most relevant interactions between cyclical conditions and the optimal design of labour market institutions, also drawing on recent results from the literature. As aggregate demand management in a monetary union requires cross-country coordination, we will then consider the way in which fiscal policy coordination in the EMU takes into account cyclical conditions. Finally, we will consider how conditionality, vis-à-vis stressed countries, was used in the Great Recession and the ensuing euro area crisis.

3.1 The timing of labour market reforms over the cycle

There is a huge amount of literature on the effects of institutions on labour market outcomes (Boeri and van Ours, 2013). This literature typically offers insights as to the long-run effects of institutional reforms. Less is known about the effects of reforms at business cycle frequencies, notably their effects during downturns.

One of the key findings of the literature is that during downturns it is generally preferable to increase wage flexibility as opposed to employment flexibility. The disemployment costs of minimum wages are indeed stronger during recessions, as the setting of the minimum wage may not internalise macroeconomic constraints when electoral cycles coincide with business cycles. Reforms of collective bargaining, notably those inducing more decentralisation in wage setting have been found to increase the correlation of wages with labour productivity over the business cycle (Gnocchi et al., 2015). The fiscal costs of minimum wages and

collective bargaining also tend to be particularly pronounced during downturns, as displaced workers draw unemployment benefits for a relatively long time before finding alternative employment.

In contrast, reforms reducing employment protection tend instead to amplify the responsiveness of unemployment to output changes. This is particularly true when these reforms involve contractual dualism of the “Spanish type” (Boeri, 2010). Indeed, the presence of a stock of temporary jobs built up after a two-tier reform significantly increases the response of unemployment to output decline (Bentolila et al., 2012). Gnocchi et al. (2014) also find that reforms reducing EPL involve an increase in the volatility of employment. Furthermore, Casado, Fernández-Vidaurreta and Jimeno (2015), looking at worker flows and at the socio-demographic composition of these flows based on micro data from the European Labour Force Survey, find that during the Great Recession a higher proportion of flexible temporary contracts were associated with fewer transitions of young and middle-aged workers out of unemployment.

As for unemployment benefits, their optimal level is inversely related to the magnitude of the elasticity of unemployment duration to unemployment benefits. The latter is generally found to be much weaker during downturns. For instance, according to Kroft and Notowidigdo (2014), a one standard deviation increase in the unemployment rate almost halves the duration elasticity. This suggests that reforms should possibly increase generosity when the unemployment rate increases, and reduce it during expansions. Similarly Landais (2014) finds that the labour supply response to unemployment benefits is pro-cyclical, while Jung and Kuester (2014) and Mitman and Rabinovich (2014) suggest that unemployment benefits should be raised in the aftermath of a negative shock. Overall, it may be desirable to provide more generous insurance during periods of high unemployment and reduce benefit generosity during periods of low unemployment. This may require a rule-based system, with automatic clauses consistent with a fiscal budget balanced automatically over the business cycle (Andersen, 2014).

A similar structure also seems appealing in pension systems. Reforms increasing the retirement age steeply while labour demand is declining may backfire as employers stop taking on new workers, preventing recessions from being used as cleansing devices (Caballero and Hammour, 1994), especially in countries where young workers are better educated than incumbents. Some flexibility in retirement age may be desirable when actuarial reductions are applied to people retiring before the normal retirement age. Clearly this flexibility would increase the annual government deficit, but would not affect the implicit debt of pension systems or the intertemporal budget constraint. By increasing public deficits during downturns and improving the fiscal balance later on, this actuarially neutral flexibility operates as an automatic stabiliser.

3.2 The drawbacks of the EU fiscal policy framework

The theoretical and empirical results summarised in the previous section suggest that countries badly hit by shocks should not be forced to consolidate immediately, and that the fiscal framework should give some fiscal leeway to reforming countries. An environment of very tough fiscal consolidation may be inconsistent with an acceleration of structural reforms,

not only because such reforms may be politically more difficult, but mostly because they may not be desirable under an environment of strong fiscal contraction.

Table 2
Conditions under the new EU fiscal framework

(percentage points of GDP)

	Condition	Required annual fiscal adjustment	
		Debt below 60% and no sustainability risk	Debt above 60% or sustainability risk
Exceptionally bad times	Real growth < 0 or output gap < -4	No adjustment needed	
Very bad times	-4 ≤ output gap < -3	0	0.25
Bad times	-3 ≤ output gap < -1.5	0 if growth below potential, 0.25 if growth above potential	0.25 if growth below potential, 0.5 if growth above potential
Normal times	-1.5 ≤ output gap < 1.5	0.5	> 0.5
Good times	output gap ≥ 1.5 %	> 0.5 if growth below potential, ≥ 0.75 if growth above potential	≥ 0.75 if growth below potential, ≥ 1 if growth above potential

Source: European Commission.

EU macroeconomic policy coordination throughout the Great Recession was in clear contradiction with the principles stated above. With regard to demand management, fiscal policy was constrained by the way the EU policy coordination framework was designed and imposed. The fiscal framework at the EU level draws largely on the notion of the natural rate of unemployment, i.e. the NAWRU. In particular, in the presence of output gaps exceeding 4%, temporary deviations from both the deficit and the debt targets are allowed (see Table 2). Output gaps are themselves estimated on the basis of the potential labour input, which is obtained as follows: $L^p = \text{WAPOP} * \text{LFPR} * (1 - \text{NAWRU}) * \text{HW}$ where WAPOP stands for the working-age population, LFPR for the labour force participation rate, and HW for hours worked per employee. The NAWRU itself is estimated applying a Kalman filter to a system of two equations estimated simultaneously. The first equation is the Phillips curve (which can be estimated with different specifications in different countries) linking wage growth to productivity and unemployment, while the second equation delivers the NAWRU itself. The measurement and estimation problems related to estimates of the NAWRU in the United States (a country with longer series and better measures of inflation than many euro area countries) are discussed in some detail in Staiger et al. (1997), Ball and Mankiw (2002) and, more recently in the context of the Great Recession, Watson (2014).

Table 3
Dispersion of NAWRU estimates

a) OECD				
	Mean	Coefficient of variation		
		Overall	Between	Within
Belgium	7.89	3.6%	3.7%	0.5%
Czech Republic	7.38	9.7%	1.6%	9.6%
Denmark	4.91	6.1%	4.8%	3.9%
Germany	8.04	5.4%	4.8%	2.9%
Ireland	6.4	20.8%	19.8%	7.7%
Greece	9.88	6.2%	5.4%	3.3%
Spain	11.42	14.2%	11.5%	8.7%
France	8.59	3.0%	1.1%	2.8%
Luxembourg	3.65	15.4%	8.5%	13.0%
Hungary	6.85	9.6%	4.4%	8.5%
Netherlands	3.76	6.5%	3.5%	5.5%
Austria	4.57	10.0%	10.1%	1.8%
Poland	15.31	14.9%	3.5%	14.5%
Portugal	6.48	16.5%	13.3%	10.1%
Slovakia	15.59	10.6%	2.5%	10.4%
Finland	8.54	9.4%	3.8%	8.7%
Sweden	6.84	14.2%	14.5%	1.9%
United Kingdom	5.63	5.0%	3.0%	4.0%

b) European Commission estimates				
	Mean	Coefficient of variation		
		Overall	Between	Within
Denmark	5.0	24.5%	3.3%	24.3%
Germany	5.9	42.8%	3.7%	42.6%
Ireland	9.9	38.5%	1.5%	38.4%
Greece	6.1	44.4%	6.8%	43.9%
Spain	11.4	36.1%	3.9%	35.9%
France	7.6	30.1%	2.9%	30.0%
Italy	8.1	18.3%	3.6%	18.0%
Netherlands	4.9	34.1%	6.6%	33.5%
Austria	2.8	39.5%	1.6%	39.5%
Portugal	5.8	19.7%	2.0%	19.6%
Finland	6.8	50.1%	2.2%	50.0%
Sweden	3.6	59.4%	11.2%	58.4%
United Kingdom	6.7	31.9%	0.8%	31.8%

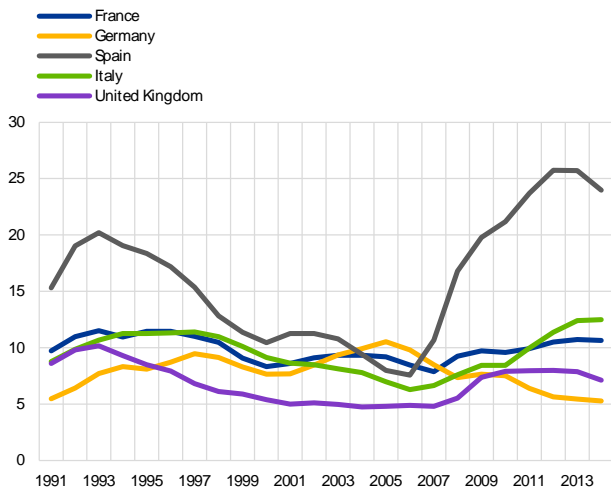
Source: Authors' calculations on OECD and European Commission data.

Table 3 provides a synthetic measure of the dispersion in the estimates of the NAWRU provided by the OECD. In particular, we decompose the total variance in two components – one that is related to time variation within any forecast round, and another that captures differences across forecast rounds. The message is quite clear: for some countries, including Ireland, Spain and Portugal, there are very large confidence intervals around the mean, even when only variation within the round (for given policies) is considered. Similar results are obtained by using the European Commission's estimates (Chart 9).

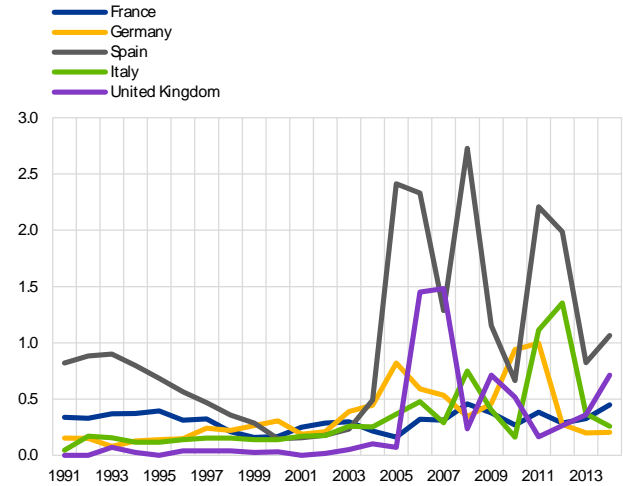
Chart 9

NAWRU estimates for various euro area countries

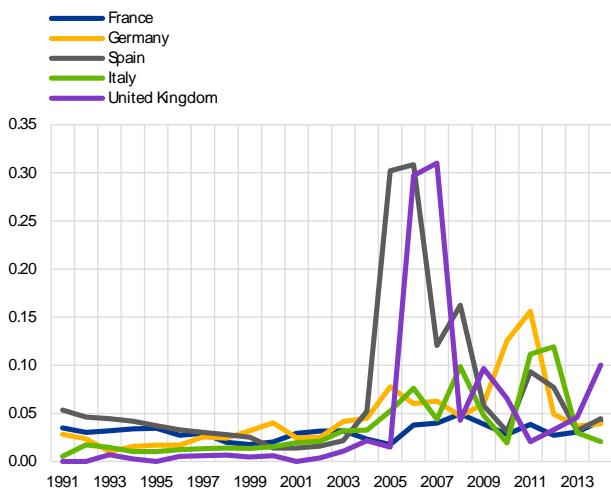
European Commission estimates



European Commission estimates, standard deviation across vintages



European Commission estimates, coefficient of variation across vintages



Source: Authors' calculations on European Commission data.

Needless to say, there is nothing natural about unemployment rates that appear to fluctuate so much over time, not only between vintages but also within vintages, for given policies. All this suggests that the output gap measures used in fiscal policy coordination are unreliable.

Moreover, structural unemployment is also an elusive concept from a microeconomic perspective. The empirical implementation of measures of (inter-industry, occupational and regional) mismatch unemployment (Sahin et al., 2014) faces daunting problems of consistency and comparability as data on vacancy rates in some countries are meaningless. Skills mismatches are also rather poorly defined when allowances are made for the skill downgrading of significant portions of the workforce (for instance, first-generation migrants) and the fungibility of a more educated labour force with youngsters being overrepresented in the unemployment

pool.

But even supposing that it were possible to disentangle cyclical unemployment from structural unemployment and that unemployment in the EU was mainly of the mismatch type, strongly increasing labour demand would not be quite as harmful because now the enemy would be deflation and wage growth would remain subdued. In fact, if one takes seriously the hypothesis that Europe, given its demographic and productivity outlook, is bound to suffer from a permanent shortfall in demand (the so-called secular stagnation hypothesis), then “there is room for doubt about whether the cycle actually cycles” (Summers, 2014), and higher wage inflation would bring the economy closer to the full employment equilibrium (see Eggertsson and Mehrotra, 2014; Jimeno, 2015).

In summary, cross-country coordination in fiscal policies would be better off taking the actual unemployment rates as a reference, rather than being based on unreliable and possibly meaningless estimates of structural unemployment or output gaps, whose association with inflation and other macroeconomic imbalances may be different in the current macroeconomic context than in the standard macro stabilisation manual.

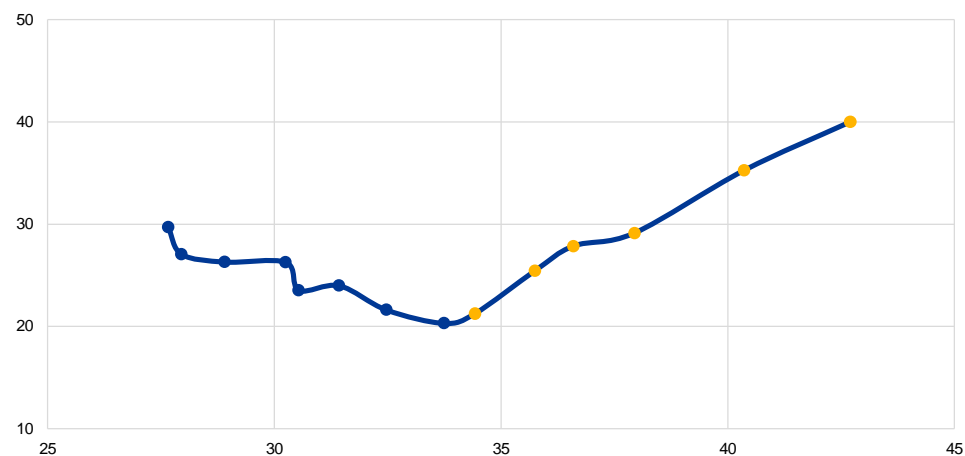
3.3 Bad conditionality and misguided reforms

EU conditionality placed a great deal of emphasis on labour market reforms, which received much more attention than product market reforms. Even when the diagnostics of dysfunctional labour markets were right,⁸ formal or informal rescue programmes rarely addressed the main determinants of poor labour market performance. The key lessons from the international experience of labour market reforms were lost in translation. Recommendations from international institutions were translated into reforms that backfire during recessions, ignoring the issue of contractual dualism, overlooking best practices in subsidising short-time work, and not addressing the key issues related to the reforms of collective bargaining and pension systems. We offer below three examples, drawing on the Italian, Spanish and Greek experiences throughout the crisis.

Chart 10

Youth unemployment and employment rates among older workers before and after the Great Recession

(y-axis: unemployment rate (percentage of population aged 15-24), x-axis: employment rate (percentage of population aged 55-64))



Source: OECD.

Note: Data from before the Great Recession are marked in blue and those after the Great Recession in yellow.

In the case of Italy, fiscal consolidation forced the government to reduce the duration of the income support schemes for the unemployed at the same time as a pension reform was increasing the retirement age. In the midst of a major recession, this left many older workers displaced during the Great Recession without the soft landing scheme that had been internalised in the collective dismissal agreement (the so-called “esodati” problem), forcing the government to adopt a number of ad hoc (and costly) measures to deal with this problem.

⁸ See, for instance, Blanchard, Jaumotte and Loungani (2014).

As older workers are more protected than young workers, the phasing out of any escape route to retirement also helped concentrate even more employment adjustment on youngsters. While in normal times there is no “lump of labour” and youth unemployment generally declines as employment among older workers increases (blue symbols in Chart 10), increasing retirement age and phasing out any bridging scheme to retirement in the midst of a major recession may concentrate all the adjustment on young people (red symbols in Chart 10).

In Spain, a strong case was made for wage moderation (as opposed to microeconomic wage flexibility). The request was also for a stricter control of the budget execution of regional governments and for more transparency, timeliness and detail in the publication of monthly and quarterly government finance statistics. In fact, during the execution of the financial sector rescue programme in 2012 the Spanish government implemented comprehensive labour market reforms to provide firms with more flexibility in adjusting their labour force by reallocating workers internally, reducing working hours and altering other employment conditions, modifying wages for incumbent workers and allowing for more decentralisation in wage setting. A pension reform aimed at slowing down the rise of pension expenditures was also carried out. Although it seems evident that these labour market reforms may have been instrumental in delivering faster wage adjustment and a realignment of competitiveness in the Spanish economy, they did not successfully address contractual dualism and only mildly affected wage flexibility at the microeconomic level. As for the pension reforms, they were far from guaranteeing the actuarial neutrality in pension systems that was needed to adjust the labour force smoothly in times of recession and very far from restoring the long-term sustainability of Spanish pensions.

Finally, in the case of Greece, the Memorandum of Understanding asked for fiscal austerity and welfare cuts to consolidate public accounts, and wage reductions to restore competitiveness. This was done by cutting the coverage of unemployment and health benefits, reducing the minimum wage by between one-third and one-quarter and increasing retirement age. No reference was made to measures to promote economic efficiency and enhance productivity. The imposition of these policies on an economy with such profound structural weaknesses as Greece exacerbated the social impact of the crisis by harming in particular the less protected segments of the population and spreading poverty in a country where levels of wage, income and wealth inequality were already high (Matsaganis, 2013).

Overall, within the three cases reviewed above, the key policy actions were i) wage moderation, ii) reductions in severance pay and, more broadly, the strictness of employment protection, and iii) increases in retirement age. References to either contractual dualism or to schemes inducing more adjustment along the intensive margin, such as short-time work or working-time accounts, were either less emphasised in the recommendations by international institutions or “lost in translation” when national governments acknowledged these recommendations. The possibility of introducing actuarial reductions to early retirement rather than forcing a rapid increase in the retirement age was also overlooked, and, in any event, prevented by the objective of obtaining immediate reductions in public pension outlays.

In summary, there are reasons to believe that labour market reforms were generally implemented without learning from the heterogeneity in labour market responses to shocks in

the euro area, and not taking into account the fact that fiscal measures and labour market reforms that are effective in normal times may not be desirable during major recessions.

3.4 Moral hazard

A final lesson learnt from the recent experience is how to use the fiscal constraint as a device to induce institutional reforms. Relaxing the fiscal constraint during a recession was deemed to exacerbate moral hazard problems in a monetary union. A typical (and topical) concern when discussing the implementation of labour market reforms is indeed that governments are less willing to do so without being constrained by a strong fiscal restriction. However, our analysis suggests that this argument is ill suited for a number of reasons.

First and foremost, the effects of structural reforms are not independent of cyclical conditions. Some reforms may be desirable only during upturns and would deliver higher unemployment than in a no-reform scenario during downturns. This is particularly the case for EPL, but unemployment benefit and retirement plan reforms should also be fine-tuned to take into account cyclical fluctuations.

Second, the types of reforms that are desirable during downturns are typically those that involve higher public expenditure. This is the case, for instance, for the short-time work schemes used in Germany to mitigate the effects of the Great Recession. Many countries, including the United States, also made their unemployment benefit systems more generous, a reform that is not within the realm of possibilities for countries forced to carry out a major fiscal consolidation in the midst of a recession. By the same token, flexicurity reforms that substitute employment protection (involving severance payments by firms) for unemployment benefits (paid out of social security contributions and general government revenues during recessions) require some fiscal room, particularly during a recession. Finally, reforms operating on the intertemporal budget constraint, which is relevant for pension systems, are inconsistent with fiscal consolidation targeting the yearly public deficit.

Third, although the institutional framework put in place in the EU to deal with policy coordination has been somewhat enhanced during the crisis, there is still a long way to go to make its implementation more efficient. A better way to exert EU conditionality is to go directly to citizens and promote best-practice institutions.

4 How EU conditionality can help governments reduce unemployment

There is still a lot of ground to cover in improving labour market institutions in Europe, and supranational authorities have a crucial role to play in this reform process. The cross-country divergence in unemployment evolutions is not a reason to strengthen the country-specific dimension of employment policies. Quite the opposite; the difficulties faced by governments in introducing best-practice institutions highlight the resistance to reforms by powerful interest groups favouring the status quo.⁹ In this context, more active involvement of the

⁹ On this topic it is very enlightening to read Fornero (2013).

European Commission in the design and implementation of labour market policies is essential. At the same time, these reforms have strong effects on income distribution and may require those losing out to be compensated. Thus greater involvement of the EU would be acceptable to governments of Member States only if it goes hand in hand with adequate funding from European employment programmes. This supranational funding, if well designed, could also lessen the institutional shortcomings of some of the countries and play a stabilising role across the euro area. As is the case with access to fiscal leeway, it is more about using the carrot than the stick.

4.1 Towards positive conditionality

In order to establish other conditionality mechanisms that could operate without reducing the scope of structural reforms, we propose three such supranational “positive conditionality” schemes, as opposed to the negative conditionality used to date. These schemes are designed i) to be partial complements of national programmes, not substitutes for them, ii) to solve the moral hazard issue as access to the European programmes is conditional on accepting new rules for EPL, wage setting and entitlements to unemployment benefits, and iii) not necessarily to imply either large expenditures or permanent transfers across countries.

Moreover, a key ingredient of our proposals is the partial and gradual introduction of individual accounts, so that the benefits of implementing the programmes go directly to the workers, rather than to governments, social agents and other intermediaries. And as a result of such benefits being fully portable across national jurisdictions, they would be perceived as EU-wide entitlements and would also reduce some barriers to transitory labour mobility, which could also play a role as a stabiliser in the event of asymmetric shocks.

4.1.1 The European employment contract for equal opportunity

Labour costs, including high and uncertain firing costs, are often singled out as the main reason why employers refrain from hiring workers under the regular full-time/open-ended employment contract. This is particularly true in the countries where EPL reforms progressed “at the margin”, not by changing employment conditions for the regular contracts, but by introducing other types of “atypical” contracts, usually either part-time or fixed-term contracts. The inefficient turnover generated by this reform strategy seriously impedes productivity growth (Bassanini et al. 2014; Boeri, Garibaldi, and Moen, 2015).

Facing similar problems (and an acute pension funding problem), Austria successfully implemented an EPL reform in 2002 by introducing individual savings accounts. In the new regime, severance pay does not depend on the reasons for terminating the contract and is covered by the employers’ contributions (1.53% of the salary) into a fund. In the case of dismissal after three years of tenure, the employee can choose between either receiving the funds accumulated in their account or saving them for a future pension.¹⁰

¹⁰ For more details, see Hofer, Schuh, and Walsh (2011).

The reform experience during the European crisis shows that no significant improvements were achieved in the reform of inefficient EPL or in the correction of labour market segmentation, even when EPL reforms were mandated under a formal rescue programme. We believe that an alternative strategy based on the Austrian system could have been more successful.

Let us examine how it could work. The European Commission would design a new single open contract with severance pay gradually increasing with worker tenure, just like in the new open-ended contract introduced in Italy, effective since March 2015. The contract comes with individual savings accounts into which both employers and some European funds (Structural Funds combined with the European Social Fund) contribute. Employers get some reduction in severance pay obligations and some reduction in labour costs (as European contributions also play the role of deferred wage subsidies). Workers gain from more stable jobs (and from the wage subsidy). Additional European funding to be put towards active labour market policies or unemployment insurance could also be implemented through contributions to the individual accounts.

4.1.2 The European unemployment insurance programme

The lack of automatic stabilisers operating at the EMU level has been evident throughout the crisis. At the same time, “solidarity” and the promotion of social and economic cohesion among Member States are explicitly stated goals of the European Treaties. Thus, unemployment insurance implemented at the central level could be an attractive development, insofar as it could deliver on both fronts (i.e. the absorption of asymmetric shocks and the promotion of economic convergence).¹¹ However, current unemployment insurance schemes in many European countries are far from optimal as there is inadequate management of moral hazard issues on both sides. On the one hand, the search activity of insured workers may be affected by entitlements. On the other hand, the financing of benefits does not always make employers internalise the social costs of unemployment. Moreover, introducing an EMU-wide unemployment insurance scheme when labour market performance and institutions are as heterogeneous as highlighted in previous sections may be counterproductive.

Nevertheless, there is a simple way to overcome these problems – by making the unemployment insurance scheme available only to those countries that achieve substantial progress towards a better design of labour market institutions. As in the case of the European employment contract, the implementation of this scheme could be eased by the introduction of individual accounts that could make unemployment benefits portable across countries, complementing the national insurance schemes. This European unemployment benefit could also be operated in conjunction with the equal opportunity contract in order to improve employment incentives (Brown, Orszag and Snower, 2008) and introduced as a partial complement to national unemployment schemes. As shown by Dolls, Fuest, Neumann and Peichl (2014), with proper contingency and claw-back mechanisms this European

¹¹ References to previous proposals along these lines include Delpla and Gourinchas (2014) and Claeys, Darvas and Wolff (2014).

unemployment insurance scheme does not need to imply substantial permanent transfers across countries, while it does preserve some redistributive and stabilising properties.

4.1.3 Actuarial neutrality and the portability of pension rights across jurisdictions

Public pension systems across the EU differ substantially from one another. Some of these systems have recently been reformed to achieve long-term sustainability, while others are still accumulating an increasing and potentially explosive (implicit) pension debt. EU fiscal coordination should force governments to make this implicit debt explicit, at the same time as informing citizens about their future pension rights. One way to do this would be to require social security administrations to produce personalised pension projections that would be disclosed to all contributors along the lines of the Swedish orange envelope experience (Sunden, 2014). These projections could then be aggregated at the country level to produce not only projections of total pension expenditures, but also entire distributions of pension outlays for particular groups of individuals. This information is essential for evaluating not only the financial but also the social sustainability of public pension systems, hence the potential spillovers of pension reforms into other social transfer schemes.

It would also be sensible to use these projections in fiscal policy coordination at the EU level, allowing for temporary increases in public pension outlays during recessions, provided that these increased expenditures are compensated by larger savings later on and that they do not have an impact on the overall pension debt. This would be an important step towards improving the cyclical properties of labour market and social policy institutions and enhancing the intertemporal and long-run dimension of the EU fiscal framework at the same time.

In this context, reforms introducing a level of pensions which is at least compatible with self-sufficiency and actuarial reductions to pensions obtained before the retirement age would no longer be unattainable by countries facing adverse shocks. This flexibility in retirement age could soften the cost of adjustment to macroeconomic shocks while rejuvenating the workforce. The fact that differences in the age of retirement involve actuarially neutral adjustments also makes the full portability of pension rights across jurisdictions sustainable and intra-EU bilateral agreements among social security administrations more transparent. Workers could move across jurisdictions, cumulating pension rights that would be paid by the administrations where the contributions were collected, based on the country-specific rules. Given the presence of actuarial reductions, differences in the retirement age across jurisdictions would not prevent this full portability, as they do not affect the long-term debt of the single national administrations involved.

5 Final remarks

Unemployment in Europe is becoming more and more country-specific. Asymmetric shocks combined with cross-country institutional differences have resulted in highly heterogeneous effects on national labour markets. It is difficult to foresee a united Europe and a properly functioning Economic and Monetary Union with so much cross-country divergence in labour

market conditions and very limited instruments to insure unemployment risks across countries.

European supranational institutions throughout the crisis over-emphasised the realignment of external competitiveness by relying on wage reductions, not realising that these reductions are most costly when they have to be achieved by nominal wage cuts (given the low inflation rate), households are highly indebted, and governments had to reduce public consumption, investments and transfers to consolidate public debt. When structural reforms were implemented, either at the initiative of national governments or of countries under formal programmes, they focused on reducing the costs of dismissals and forcing downward wage adjustments in the middle of a recession, rather than on removing structural impediments to productivity growth in poorly regulated labour markets. The international institutions with the capacity to apply some of their own initiatives to change the orientation of reforms and employment policies (for instance the European Commission) did very little in this respect and failed to design new programmes at the supranational level.

In this paper we offer some proposals to change this state of affairs, looking forward to an enhanced role for European supranational institutions in improving the functioning of labour markets. In this regard, we call for European employment policies to complement not substitute national policies in the areas of EPL, unemployment insurance and pension entitlements. They would be introduced under positive conditionality, offering different (and we believe more effective) incentives for national governments to introduce badly needed structural reforms. And, finally, they would target EU citizens rather than governments or local administrations or intermediaries, meaning they would be more transparent and socially acceptable.

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