

Unemployment in Europe: What does it take to bring it down?¹

Tito Boeri (Inps and Università Bocconi)

and

Juan F Jimeno (Banco de España)

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Abstract

Unemployment in Europe is not only “too high”. It is also too different across countries, belonging 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, the size and nature of shocks, and, on the other hand, country-specific labour market institutions. We argue that EU policy co-ordination and conditionality during the Great Recession and the Euro debt crisis did not properly take into account these interactions. We also propose a change in the European policy approach to fight unemployment.

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1. Introduction

Unemployment in Europe, notably youth unemployment, is not only unbearably high. It is also unbearably different across nations belonging to an economic and monetary union to the extent that talking about a European unemployment or even more so a European structural unemployment problem is highly misleading.

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

We argue that EU policy co-ordination and conditionality vis-à-vis highly indebted countries were poorly exerted during the Great Recession. Due to the incompleteness and the imperfection of the 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 NAWRU or NAIRU. This turns out to be very risky since long-term trends and the long-lasting effects of the crisis on the relationship among 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, just fluctuate too much over time to qualify for being considered as structural.

Admittedly, there have been some improvements of the policy co-ordination framework of the EU, but we are critical of the conditionality under which they have been imposed on countries, either under formal rescue programs or not. In particular, the Troika, when issuing its recommendations, missed most important reforms, and did not fully take into account the cyclical properties of its reform proposals.

We begin with some facts about country-specific unemployment trajectories, and then move on to analyse the role played by institutions, shocks and interactions between shocks and institutions in these trajectories. In this context, we look at outliers in Okun's relationship and bring some new microeconomic evidence on how firms adjusted to different shocks from a new wave of a survey on European firms across 25 countries, conducted by the *Wage Dynamics Network* of the ESCB. 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 a change in the European policy approach to fight unemployment.

2. Why unemployment is so high and divergent in Europe

2.1. Some Key Facts

Throughout the Great Recession of 2008 and 2009, unemployment in the US was consistently higher than in the European Union. Five years down the road from the global crisis, EU unemployment is almost twice as large as in the US (Figure 1a). In the EU15 it is actually more than twice as large as 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-zone has increased much more than in previous recessions: The gap between the average unemployment rate of the 4 Eurozone countries with the highest unemployment rates and that of the 4 Eurozone countries with the lowest unemployment rates is more than 15 pp. A similar comparison in the US -between the average of the 10 states with the highest and lowest unemployment rates- yields a gap of less than 5 pp (Figure 1b).

Unlike the US, 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 US than in Europe before the Great Recession, is now converging across the two sides of the Atlantic (Figure 2a). Also, in stark contrast with previous recessions, where soft-landing schemes to retirement were widely used for firms downsizing, employment rates of older workers have actually increased in most European countries throughout the Great Recession and the Eurozone debt crisis (Figure 2b).²

A main driver of European cross-country differences in unemployment is youth unemployment, climbing above (often well above) 40 per cent in Southern Europe while remaining below two-digit levels in Austria and Germany. As shown by Casado, Fernández-Vidaurreta, and Jimeno (2015), in this recession job losses were highly concentrated on young workers. Thus the explosion of youth unemployment was, unlike in previous recessions, not only related to a hiring freeze, but also to heavy destruction of jobs held by young people, with the dissolution of temporary contracts, just while employment rates of older workers were increasing (Figure 3).

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 to be therefore closely interrelated. We will now discuss whether they can be attributed to institutional features or to within and between countries differences in the intensity and characteristics of shocks.

² The convergence in European and US labour force participation rates for workers aged 15-64 should not hide important differences in the degree of mobilization of labour supply of older workers. Employment rates of workers aged 65 or more are close to 20% in the US and Japan, but lower than 10% in the EU. When the employment rate is computed over the population older than 15 years of age, it is 8 pp higher in the US than in the Eurozone.

2.2. Between countries vs. within countries variation

Some preliminary indications as to the role played by shocks and labour market institutions in these developments come by disentangling between countries from within countries evolutions, 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 the rise of job destruction and the fall of job creation in the younger cohorts, we focus on youth unemployment to perform this decomposition.

In particular, we consider the EU as a single unit, and compute two well-known indexes of inequality (respectively 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 per cent in 2007 to 21 per cent in 2013, an increase of 8 percentage points. This regional dispersion can be broken down into *within country* and *between country* variations, according to the following formula³:

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

The first component, T_{within} , expresses the weighted average of the Theil indexes of each sub-group of NUTS-2 regions that is the dispersion of youth unemployment rate due to *within* country variability of youth unemployment rates at regional level. The second component, $T_{between}$, captures inequality *between* EU countries, basically computing the Theil by using country means of regional youth unemployment rates. As can be seen from Table 1, from 2007 to 2013 the $T_{between}$ increased from 8 to 18 percent. On the contrary, regional divergence within each country *decreased*, with a reduction of the T_{within} from 7 to 4 percent. 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.

2.3. 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-

³ 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 .

GDP elasticity can be related to the magnitude of the macro shock. Needless to say, part of the output fall can be itself attributed to labour market institutions (in their role as sources of shocks or in the transmission mechanism of shocks generated elsewhere), but, with a very few exceptions that we highlight below, during the Great Recession the effects on output of shocks generated in the labour market are relatively second order.

Figure 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 2007-2013.⁴ The message is rather clear. A bit more than 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 the Slovak Republic. Some features of the current crisis, from its different nature across countries (i.e., for instance, the presence and magnitude of housing bubbles in the pre-crisis period, the depth of financial markets) to the different policy responses (i.e, fiscal and external financing problems, bail-out issues), to the influence of the labour market in the transmission of fundamental shocks, and lack of automatic stabilizers at the country level, explain the dispersion in GDP growth rates and, hence, in unemployment rates.

The remaining 50 per cent of the variation is not explained by GDP variation. As Figure 4 shows, there are some outliers in the relationship between GDP growth rates and unemployment variation: Spain and Germany, most notably (also Finland and Slovak Republic, 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 (Figure 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 that

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

being Y : GDP, and H : hours worked. Then

$$du = -d \ln(Y) + d \ln(LF) + d \ln(Y/H) + d \ln(H/N) \quad [1]$$

⁴ The regression line involves a beta coefficient of -0.44 (t-statistics: -4.19).

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).⁵ Clearly, EU countries behaved very differently in the way these three components accommodated the response to negative demand shocks (Figure 6). This heterogeneity in the use of intensive and extensive margins also point to the role played by labour market institutions during the Great Recession and the Eurozone crisis.

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, wage, hours worked, and other adjustment mechanisms, is provided by an ESCB research network (*Wage Dynamics Network, WDN*), which has conducted ad hoc firms' surveys. Its most recent wave, covering 25 European countries, was addressed at measuring firms' perceptions on the nature of shocks driving the Great Recession, responses to those shocks, and the constraints imposed by labour market institutions on those responses.

At the time of writing this paper, only very preliminary WDN-3rd wave data (and only for a subset of these countries) are available.⁶ Nevertheless, some interesting patterns, which will be further investigated when the whole data set is compiled and harmonized, are emerging.

First, as shown in Figure 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 more 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 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 (Figure 8a). A similar cross-country positive association is also observed with regards to the incidence of debt refinancing problems. This suggests that wage

⁵ 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].

⁶ We are grateful to participants in the WDN network for allowing us to use these preliminary data, and to Samuel Skoda for help in computing the statistics presented below. In Figures 7 and 8 the data for countries in bold letters are weighted by employment, while the remaining data are non-weighted. In countries where both set of data are available, differences are not qualitatively important.

reductions could have been a way for liquidity-constrained firms to borrow from workers.⁷ Also, given the magnitude of the demand and financial shocks, in Southern European countries (France, Spain, and Italy) downwards nominal wage rigidity seems to be more binding than in Eastern European countries (Slovenia, Latvia, Estonia), where internal devaluations took place in a less gradual fashion. Finally, in those countries where downwards nominal wage rigidity was more binding, employment adjustments were more prevalent, with significant differences between temporary and permanent employment in countries with a dual employment protection legislation (Spain, Italy) and with less firms reducing employment in countries, such as Germany, that could rely mostly on other margins of adjustment (Figure 8b).

Hence, micro data suggest that differences in the characteristics of the demand and financial shocks hitting EU countries during the crisis of the Euro area involved different adjustment mechanisms. While some countries seem to have had in place the proper institutions to deal with the shocks –e.g., Germany that could respond to a temporary shock by adjusting working hours- others were in a more difficult position, having to deal, under a credit crunch, with permanent shocks implying large reallocation of resources, and with labour market institutions not very prone 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 characterized by considering the two key outliers in the Okun's relationship, notably Germany and Spain. While in Germany adjustment along the intensive margin reduced the response of unemployment to the output fall, in Spain it is a decline in labour hoarding (a rise in productivity) together with some increase in participation what explains the rise of the unemployment rate.

This comparison between Germany and Spain highlights that three labour market institutions have been particularly important with regard to the characteristics of the macroeconomic adjustment observed in EU countries: i) subsidized short-time work, ii) decentralization of collective bargaining, and iii) dualism in Employment Protection Legislation (EPL, henceforth).

A. *Subsidizing Reductions in Working Hours*

Germany activated a variety of instruments to concentrate on the intensive margin the adjustment to the Great Recession. First, it increased the scope of subsidized short-time work. Secondly, it used working time accounts, essentially a scheme allowing firms to borrow from their employees: rather than being paid in case of overtime work, the employees get a right to work less hours at a later stage. Thirdly, there was yet another margin of adjustment: the introduction of mini-jobs had increased the scope of multiple job holdings in Germany and this contributed

⁷ There is also evidence that suggests that credit constrained firms increased mark-ups as a way to raise internal funds (see Montero and Urtasun, 2014, and Gilchrist et al., 2015)

to prevent outright unemployment for many workers in the case of loss of a primary (or secondary) job.

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

B. Decentralizing Bargaining

Germany decentralized wage setting in the early 1990s being a pioneer in the introduction of the so-called “exit clauses”, and therefore could use plant-level “pacts for employment and competitiveness” to allow for 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, that is, plant-level bargaining. This de facto prevented the trading of wage concessions with more employment security as in the agreements signed in Germany at the company level.

This lack of adjustment to negative shocks of hours and wages in countries with two-tier bargaining structures can be well documented based on previous waves of the WDN Survey, where firms were asked how they would reduce labour costs, whether 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 the top of multi-employer ones adjust employment more than wages or hours in response to adverse shocks, unlike firms where there is no collective bargaining at all. In particular, about 60% of firms involved in the two bargaining levels adjust mainly employment, just like firms involved only in multi-employer bargaining. Firms where bargaining presumably takes place only at the individual level instead adjust 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 to trade wage concessions with employment security, as in the case of stand-alone plant-level bargaining, concentrating all the adjustment on the extensive margin (Boeri, 2015).

C. 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, again, Figure 5). Countries with a higher contractual dualism display a 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.⁸ Large job losses among the temporary workers segment may well coexist with wage rises among the permanent contracts 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 in a labour market operating this way.

3. What went wrong

Let us summarize the evidence produced so far. High and unevenly distributed unemployment in Europe is not only the consequence of asymmetric shocks. It is true that shocks were of varying intensity and nature across countries, but even after controlling for these differences, the labour market response appear to have been different across countries. Some countries used more the intensive margin of labour market adjustment, while others concentrated the response on the extensive margin. Some countries had bargaining structures allowing for nominal wage cuts preventing mass layoffs, 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 –labour supply of older workers was increasing unlike in previous recessions– turned out to be very important in the differential rise of 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.

The above 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 put at the interaction between macroeconomic policies and institutions. Aggregate demand management should be better synchronized 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 perverse effects under severe downturns, and stabilization policies can reduce the risk that these reforms backfire. At the same time, labour market institutions themselves may have to be designed in such a way as to have countercyclical properties, and this requires giving some fiscal leeway to countries hits by asymmetric shocks in a monetary union.

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, drawing also on recent results of the literature. As aggregate demand management in a monetary union requires cross-country co-ordination, we will then consider the way in which fiscal policy co-ordination in the EMU takes into account of

⁸ On the dynamics of employment under dual EPL, see Boeri (2010) and Costain, Jimeno, and Thomas (2010).

cyclical conditions. Finally, we will consider how conditionality, vis-à-vis stressed countries, was used in the Great Recession and the ensuing Eurozone crisis.

3.1. The timing of labour market reforms over the cycle

There is a huge 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 dis-employment costs of *minimum wages* are indeed stronger during recessions, as the setting of the minimum wage may not internalize macroeconomic constraints when electoral cycles coincide with business cycles. Reforms of *collective bargaining*, notably those inducing more decentralization in wage setting have been found to increase the correlation of wages with labour productivity over the business cycle (Gnocchi et al., 2015). Fiscal costs of minimum wages and collective bargaining tend also to be particularly pronounced during downturns, as displaced workers draw for a relatively long time unemployment benefits 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 has been associated with lower transitions out of unemployment of young and middle-aged workers.

As for *unemployment benefits*, its optimal level is inversely related with 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) found that the labour supply response to unemployment benefits is procyclical, while Jung and Kuester (2014) and Mitman and Rabinovich (2014) suggest that unemployment benefit 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 clause

consistent with a fiscal budget balanced automatically over the business cycle (Andersen, 2014).

A similar structure seems also appealing in pension systems. Reforms increasing steeply the retirement age just while labour demand is declining may backfire as employers freeze new hires, preventing that recessions are 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 persons retiring before the normal retirement age. Clearly this flexibility would increase the yearly Government deficit, but does not affect the implicit debt of pension systems, and 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 stabilizer.

3.2. The drawbacks of the EU Fiscal Policy Framework

The theoretical and empirical results summarized 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. A 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 just not be desirable under a strong fiscal contraction.

EU macroeconomic policy co-ordination 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, the so-called NAWRU. In particular, in presence of output gaps exceeding 4 per cent, 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:

$$L^p = WAPOP * LFPR * (1-NAWRU)*HW$$

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 US (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 below 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 within round variation (at given policies) is considered. Similar results are obtained by using the EC estimates (Figure 9).

Needless to say, there is little of natural in unemployment rates that appear to fluctuate so much over time, not only between vintages, but also within vintages, at given policies. All this suggests that the output gap measures used in fiscal policy co-ordination are unreliable.

Moreover, structural unemployment is an elusive concept also 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. Skill mismatch is also rather poorly defined when allowance is made for the skill downgrading of significant portions of the workforce (e.g., the first-generation migrants), and the fungibility of a more educated labour force with youngsters being over-represented in the unemployment pool.

But even supposing that it were possible to disentangle cyclical from structural unemployment, and that unemployment in the EU is mainly of the mismatch type, pushing hard labour demand would not be that harmful as now the enemy is deflation, and wage growth remains subdued. In fact, if one takes seriously the hypothesis that Europe, given the 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 sum, cross-country co-ordination in fiscal policies should better take 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 stabilization manual.

3.3. Bad conditionality and misguided reforms

Even when the diagnostics of the reasons for dysfunctional labour markets were clearly identified⁹, the labour market reforms advocated under formal or informal rescue programs, did not fully address the main determinants of poor labour market performance. Indeed, the EU conditionality during the Eurozone crisis was generally exerted by promoting reforms that backfire during recessions, ignoring

⁹ See, for instance, Blanchard, Jaumotte and Loungani (2014).

the issue of contractual dualism, overlooking best practices in subsidizing short-time work, and not addressing the key issues related to the reforms of collective bargaining and pension systems. We offer below three examples of this bad conditionality, drawing on the Greek, Italian and Spanish experiences throughout the crisis respectively.

In the case of Italy, fiscal consolidation forced the Government to reduce the duration of the income support schemes for the unemployed just while 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 internalized 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. As older workers are more protected than young workers, the phasing out of any escape route to retirement also contributed to concentrate even more employment adjustment on youngsters. While in the normal times there is no lump-of-labour and youth unemployment generally declines as employment among older workers increases (blue symbols in Figure 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 Figure 10).

In the case of Spain, a strong case was made in the rescue programme for stronger 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, timelessness and detail in the publication of quarterly government finance statistics. However, it ignored that the pension reform, approved by the Spanish Parliament only a few days before the date of the letter, was far from guaranteeing the actuarial neutrality in pension systems needed to adjust smoothly the labour force in times of recession and very far from restoring the financial balance of the Spanish pension system.

Finally, in the case of Greece, the Memorandum of Understanding was asking for fiscal austerity and welfare cuts, to consolidate public accounts, and on wage reductions, to restore competitiveness. This was done by cutting the coverage of unemployment and health benefits, reducing the minimum wage between one third and one fourth, 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 especially the less protected segments of the population and spreading poverty in a country with high levels of wage, income and wealth inequality to start with (Matsaganis, 2013).

Overall, in the three cases above, the key policy recommendations were in terms of i) wage moderation, ii) reductions in severance pay and, more broadly, the strictness of employment protection, and iii) increases in retirement age. No reference was made to either contractual dualism or to schemes inducing more adjustment along the intensive margin, such as short-time work or working time accounts. 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 *immediately* reductions in public pension outlays.

In sum, there are reasons to believe that conditionality was exerted in the wrong direction, not learning at all from the heterogeneity in labour market responses to shocks in the Euro area, and not taking into account that fiscal measures and labour market reforms that are good in normal times may not be desirable under major recessions.

3.4. Moral hazard

A final lesson learnt from the recent experience is about the use of 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 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 the cyclical conditions. Some reforms may be desirable only under upturns and deliver higher unemployment than in a no-reform scenario during downturns. This is particularly the case of EPL, but also reforms of unemployment benefits and retirement plans should be fine-tuned to take into account of cyclical fluctuations.

Second, the type of reforms that are desirable during downturns are typically those that involve higher public expenditure. This is the case, for instance, of the short-time work schemes used in Germany to mitigate the effects of the Great Recession. Many countries, including the US, also made their unemployment benefit system 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 substituting employment protection (involving severance payments by firms) with 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 to bring unemployment down

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 met by Governments in introducing the best practice institutions highlight the resistance to reforms by powerful interest groups favouring the *status quo*.¹⁰ In this context, a more active involvement of the 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 compensation of losers. Thus a greater involvement of the EU would be acceptable to Governments of member countries only if it goes hand in hand with an adequate funding of European employment programmes. This supranational funding, if well-designed, could also lessen the institutional shortcomings of some of the countries and play a stabilization role across the Eurozone. As in the access to the 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 of such supra-national “positive conditionality” schemes, as opposed to the negative conditionality used so far. These schemes are designed to i) be partial complements of national programs, not substitutes for them, ii) solve the moral hazard issue, as access to the European programs is conditional on accepting new rules for EPL, wage setting, and entitlements to unemployment benefits, and iii) they do not necessarily imply neither large expenditures nor 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 the implementation of the programs go directly to the workers, rather than to governments, social agents and other intermediaries. And being such benefits fully portable across national jurisdictions, they would be perceived as EU-wide entitlements and, also, reduce some barriers to transitory labour mobility, which could also play a role as a stabilizer in case of asymmetric shocks.

A. *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 restrain from hiring workers under the regular full-time/open-ended employment contract. This is particularly true in the countries where reforms of EPL progressed “at the margin”, not by changing employment conditions under the regular contracts, but by introducing other types of “atypical” contracts, 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).

¹⁰ On this, it is very enlightening to read Fornero (2013).

Facing similar problems (and an acute pension funding problem), Austria successfully implemented a reform of Employment Protection Legislation in 2002, by introducing individual savings accounts. In the new regime, severance pay does not depend on the reasons of the termination of the contract, and is covered by the employers' contributions (1.53% of the payroll) into a fund. In the case of dismissal after three years of tenure, the employee can choose between receiving the funds accumulated in her account and saving them for a future pension.¹¹

The reform experience during the European crisis shows that no significant improvements were achieved in the reform of inefficient EPL and in the correction of labour market segmentation, not even when EPL reforms were mandated under a formal rescue program. We believe that an alternative strategy based on the Austrian system could have been more successful.

This is how it could work. The European Commission designs a new single-open contract with severance pay gradually increasing in worker tenure, just like in the new open-ended contract introduced in Italy and effective since March 2015. The contract comes with individual savings accounts into which both employers and some European Fund (combining Structural Funds with the European Social Fund) contribute. Employers get some reduction in severance pay 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 of Active Labour Market Policies or unemployment insurance can also be implemented by contributions to the individual accounts.

B. The European Unemployment Insurance Program

The lack of automatic stabilizers operating at the EMU level has been evident throughout the crisis. Also "solidarity" and 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 in both fronts (i.e., absorption of asymmetric shocks and economic convergence)¹². 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 to internalize 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: make 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

¹¹ For more details, see Hofer, Schuh, and Walch (2011).

¹² References about previous proposals on this line, i.e., Delpla and Gourinchas (2014), Claeys, Darvas, and Wolff (2014)

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 contingent and claw-back mechanisms, this European unemployment insurance scheme does not need to imply substantial permanent transfers across countries, while preserving some redistributive and stabilization properties.

C Actuarial neutrality and the portability of pension rights across jurisdictions

Public pension systems across the EU differ substantially one of another. Some of these systems have been recently reformed achieving long-term sustainability, while others are still allowed to accumulate an increasing and potentially explosive (implicit) pension debt. EU fiscal co-ordination should force Governments to make explicit this implicit debt, just while informing citizens about their future pension rights. One way to do this is to require that social security administrations produce individualized pension projections to be disclosed to all contributors along the Swedish orange envelope experience (Sunden, 2014). These projections could then be aggregated up at the country level to produce not only projections of total pension expenditures, but also entire distributions of pension outlays across individuals. This information is essential to evaluate not only the financial, but also the social sustainability of public pension systems, hence the potential spillovers if pension reforms on other social transfer schemes.

It would also be sensible to use these projections in fiscal policy co-ordination at the EU level, allowing for temporary increases of public pension outlays during recessions provided that these increased expenditures are compensated by larger savings later on, and 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, at least above a level of pensions which is compatible with self-sufficiency, 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 make 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 can 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 to cross-country institutional differences resulted into highly heterogeneous effects of the crisis on national labour markets. It is difficult to foresee a united Europe and a well-functioning European 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-emphasized realignment of external competitiveness by relying on wage reductions, not realizing 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 by the initiative of national Governments or by imposition to countries under formal programs, they focused in 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. Those international institutions with the capacity to have some own initiatives to change the orientation of reforms and employment policies (e.g., the European Commission) did very little in this respect and failed to design new programs at the supranational level.

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

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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%
<i>Theil within</i>	7%	4%	-48%
<i>Theil between</i>	8%	18%	135%

Table 2. Conditions under the new EU fiscal framework

		Required annual fiscal adjustment*	
Condition		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	$-4 \leq$ output gap <-3	0	0.25
Bad times	$-3 \leq$ 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	$-1.5 \leq$ output gap < 1.5	0.5	> 0.5
Good times	output gap \geq 1.5 %	> 0.5 if growth below potential, \geq 0.75 if growth above potential	\geq 0.75 if growth below potential, \geq 1 if growth above potential

* all figures are in percentage points of GDP

Table 3. Dispersion of NAWRU estimates

a) OECD

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

b) European Commission Estimates

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

Figure 1a. Unemployment rate, EU, US, and Japan

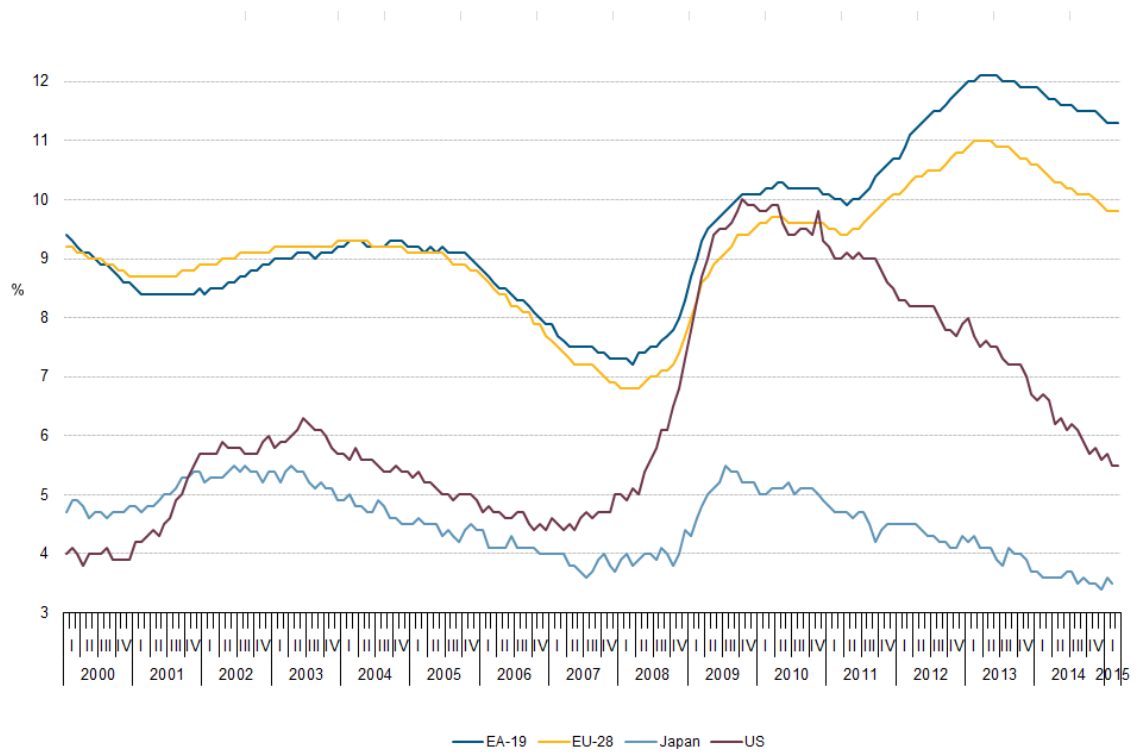


Figure 1b. Cross-country (Euro area) and cross-state (US) unemployment rates (%)

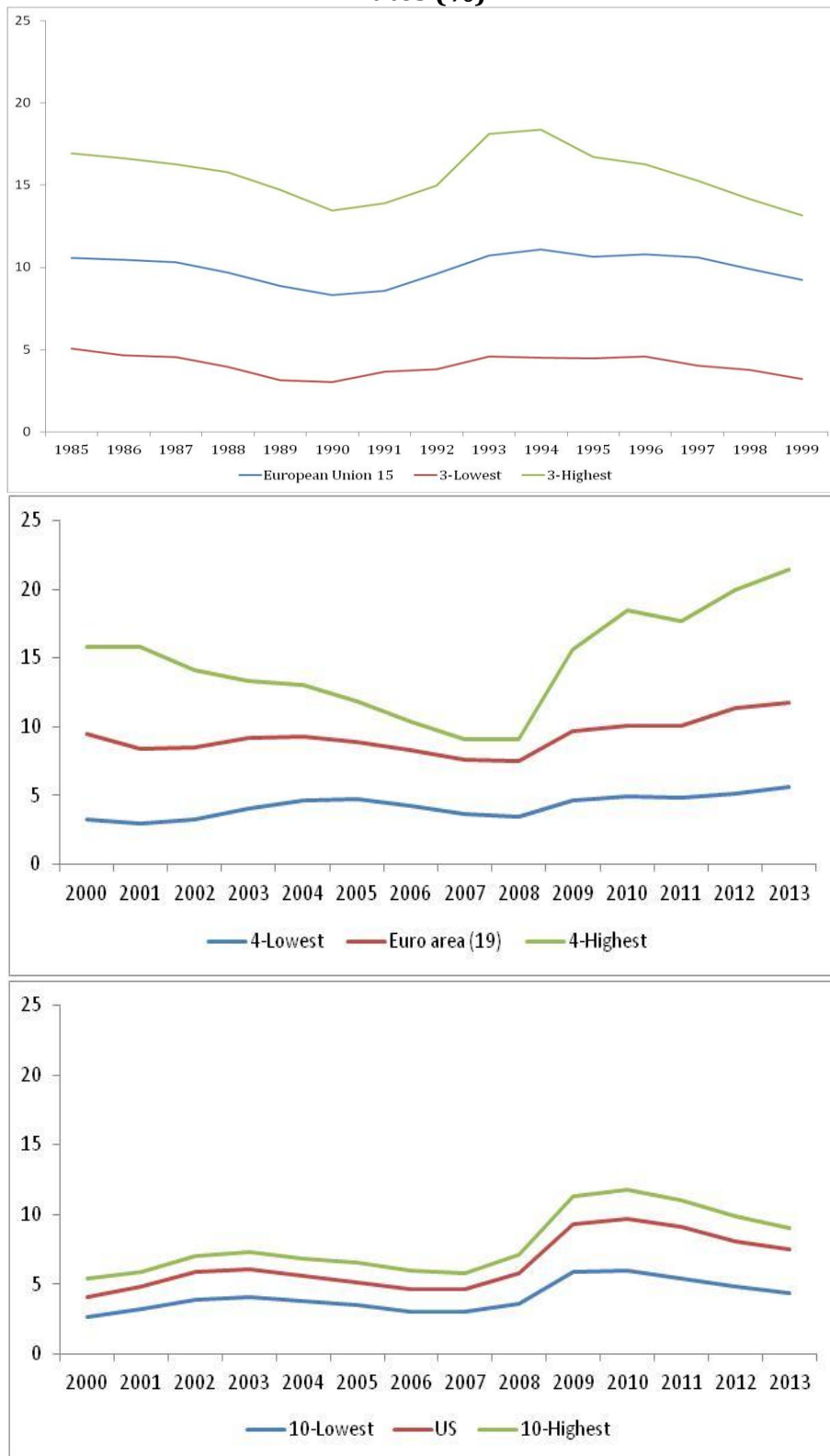


Figure 2a. Employment and participation rates (% , population aged 15-64) in Europe (and the US)

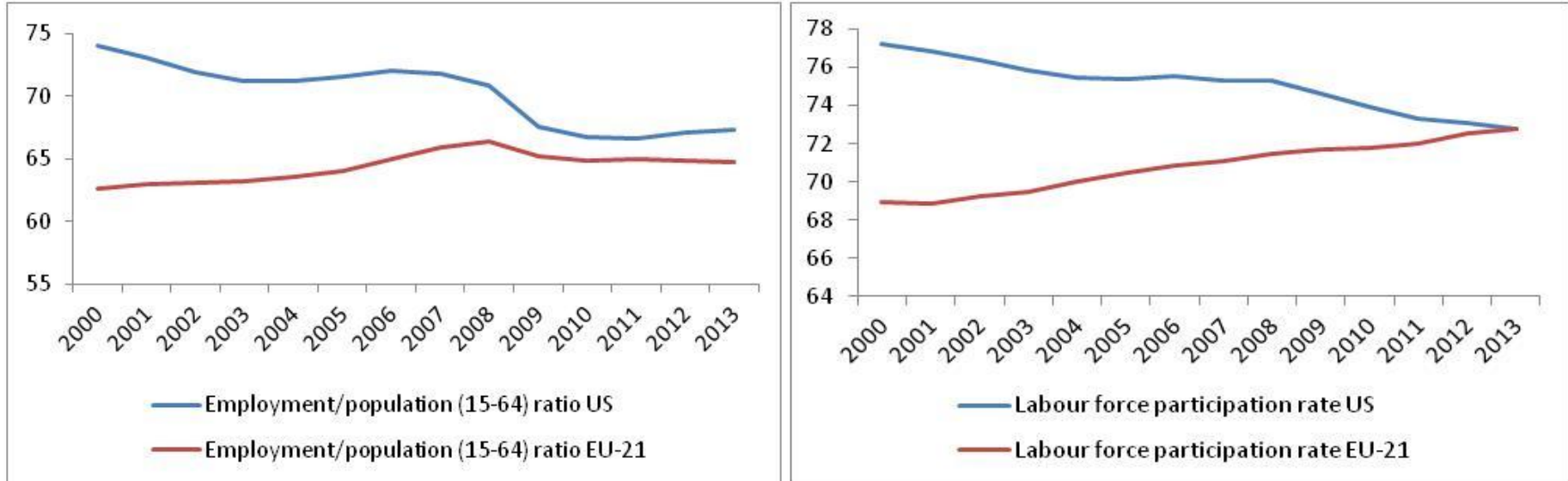


Figure 2b. Employment rates of older workers

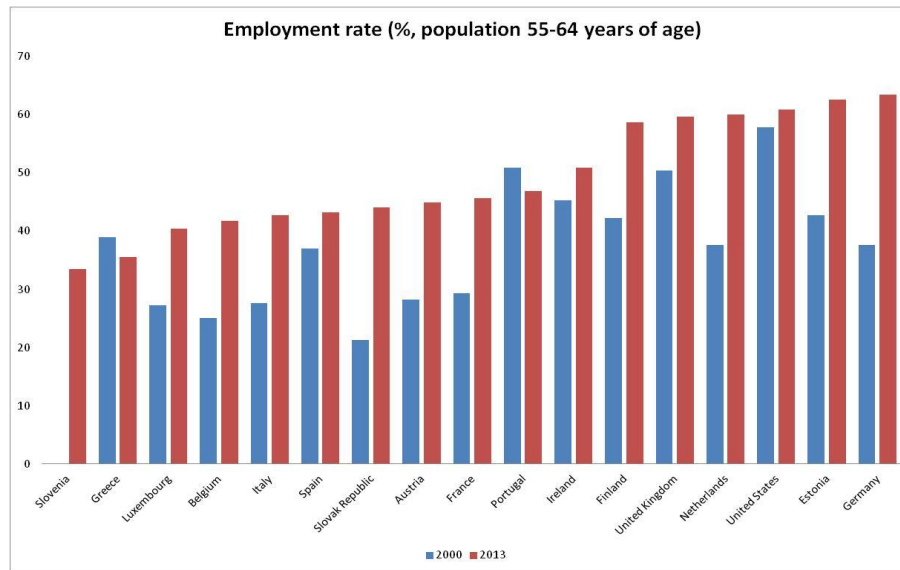


Figure 3a. Change (2007-2012) in the probability of transiting between employment and unemployment (annual flows in percentage points). From employment to unemployment.

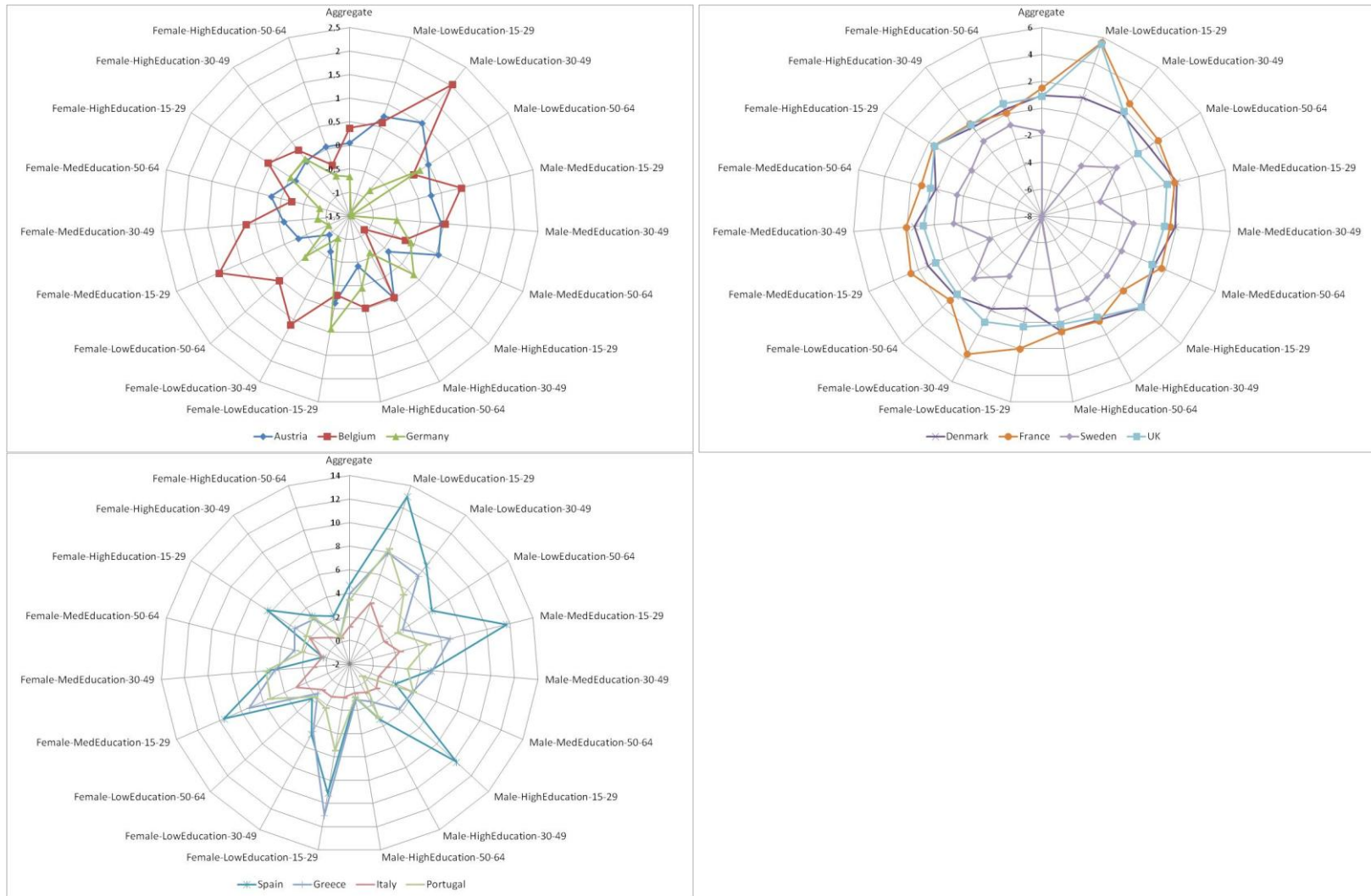


Figure 3b. Change (2007-2012) in the probability of transiting between employment and unemployment (annual flows in percentage points). From unemployment to employment

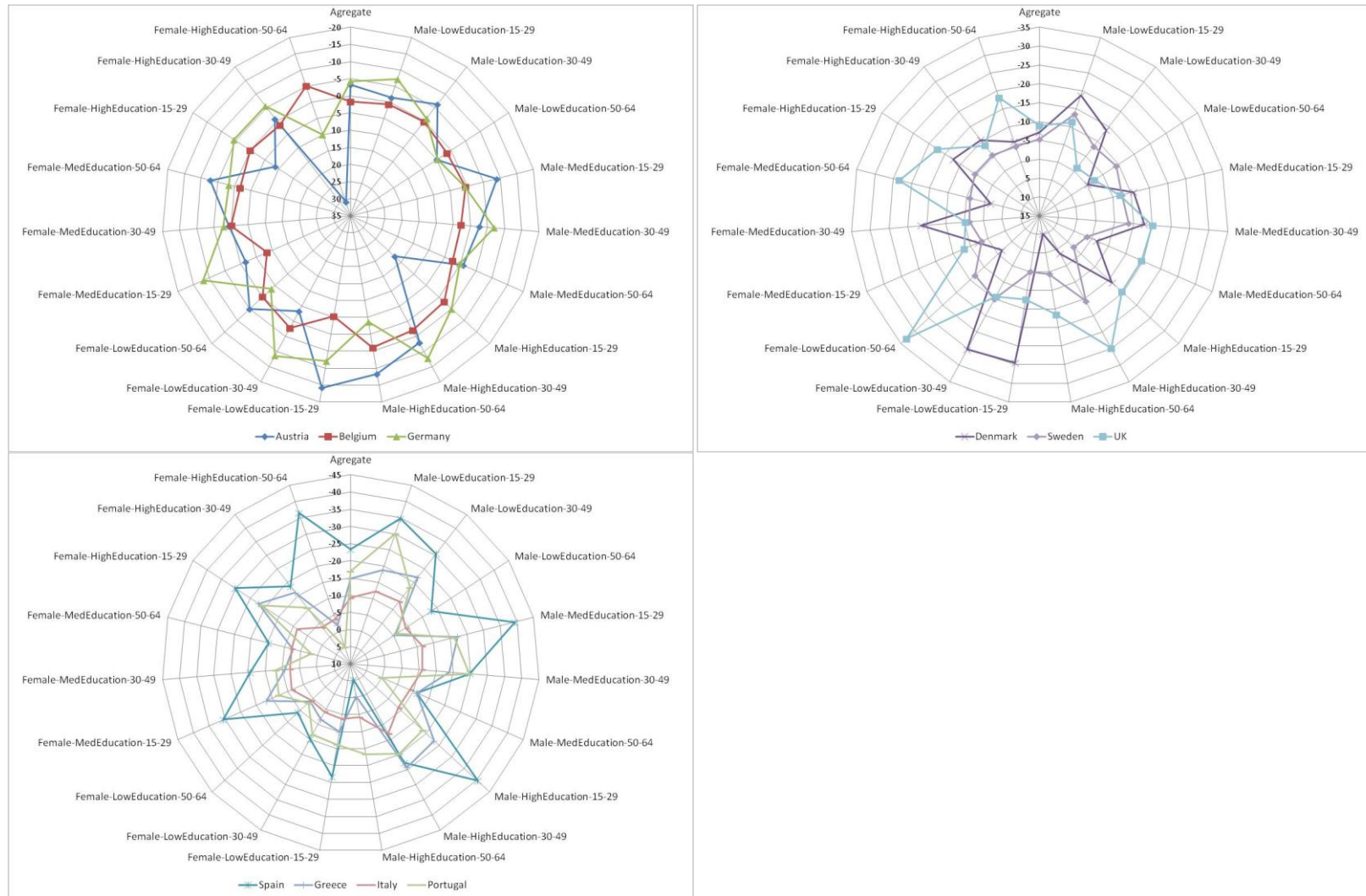


Figure 4. Okun in Europe

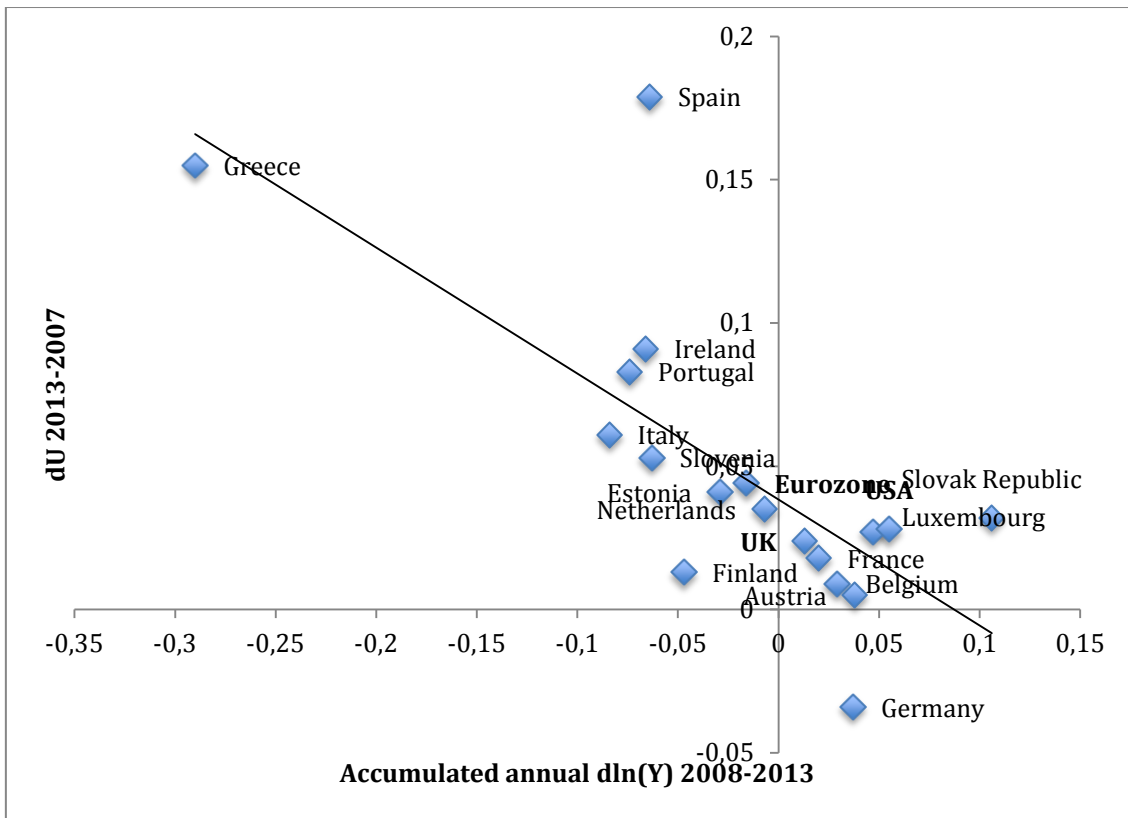


Figure 5. Unemployment responsiveness to output changes in countries with different degrees of dualism

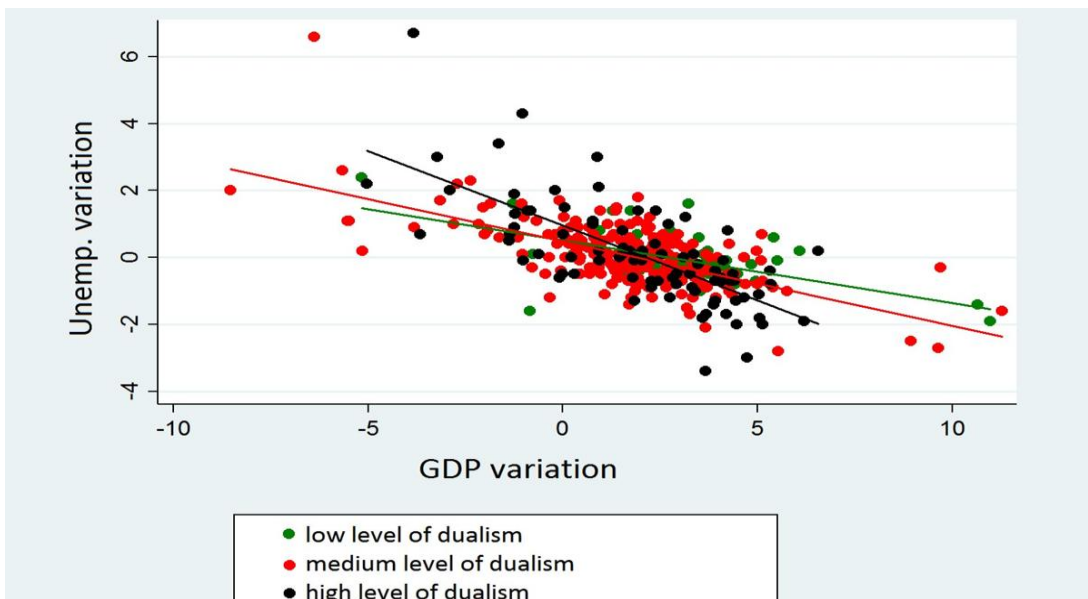


Figure 6. Role of Intensive, extensive and participation margins in unemployment to output response (2007-2013)

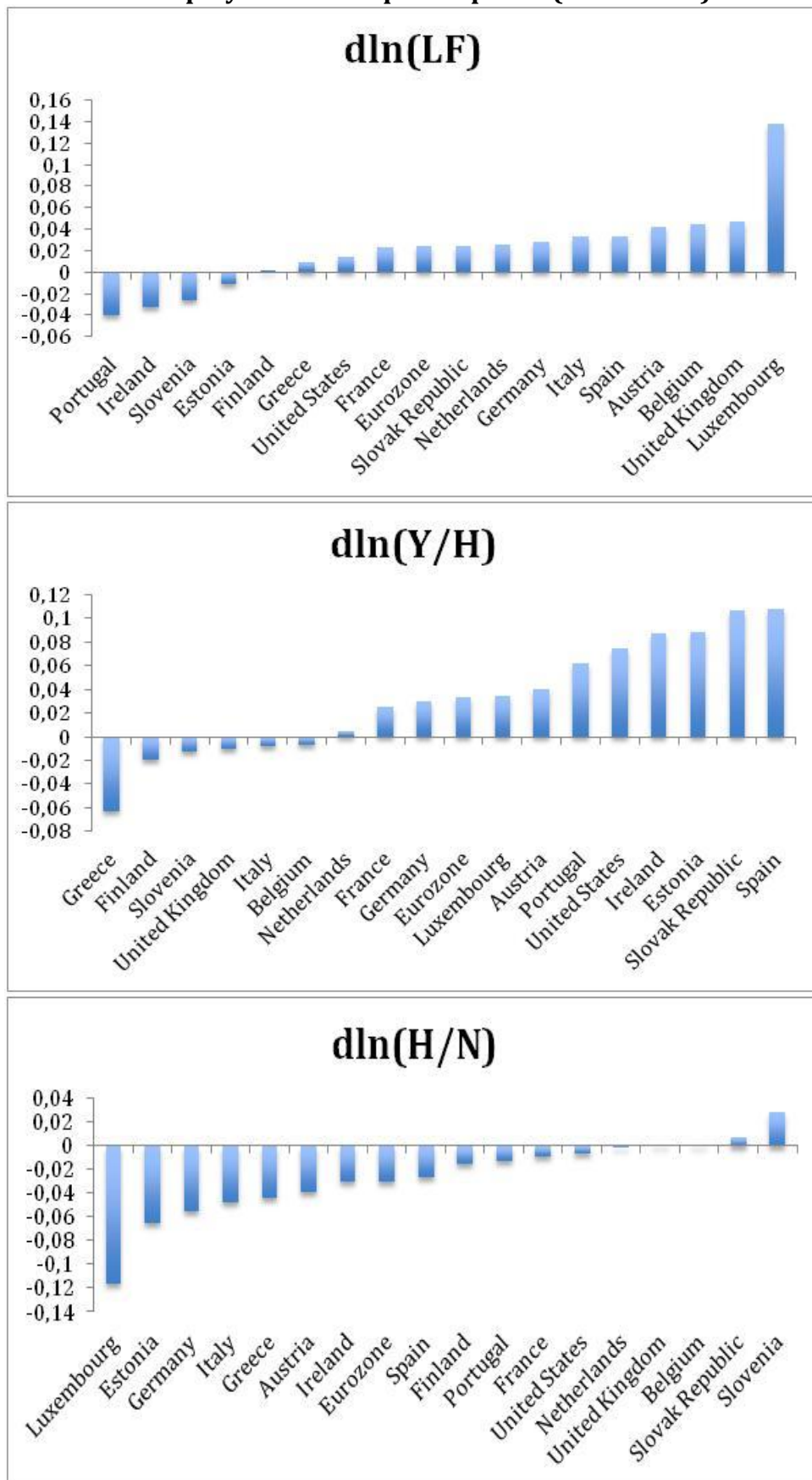
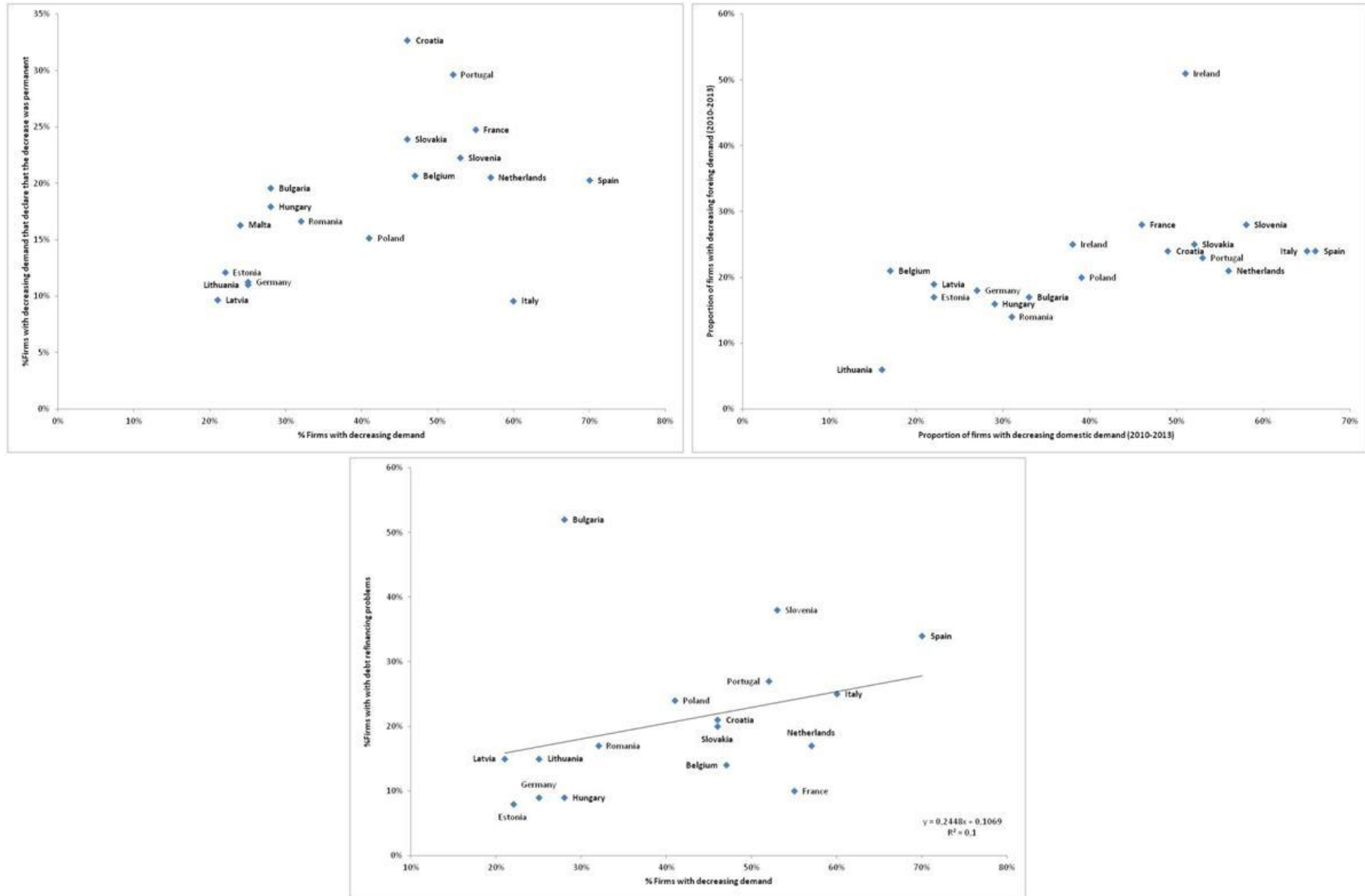
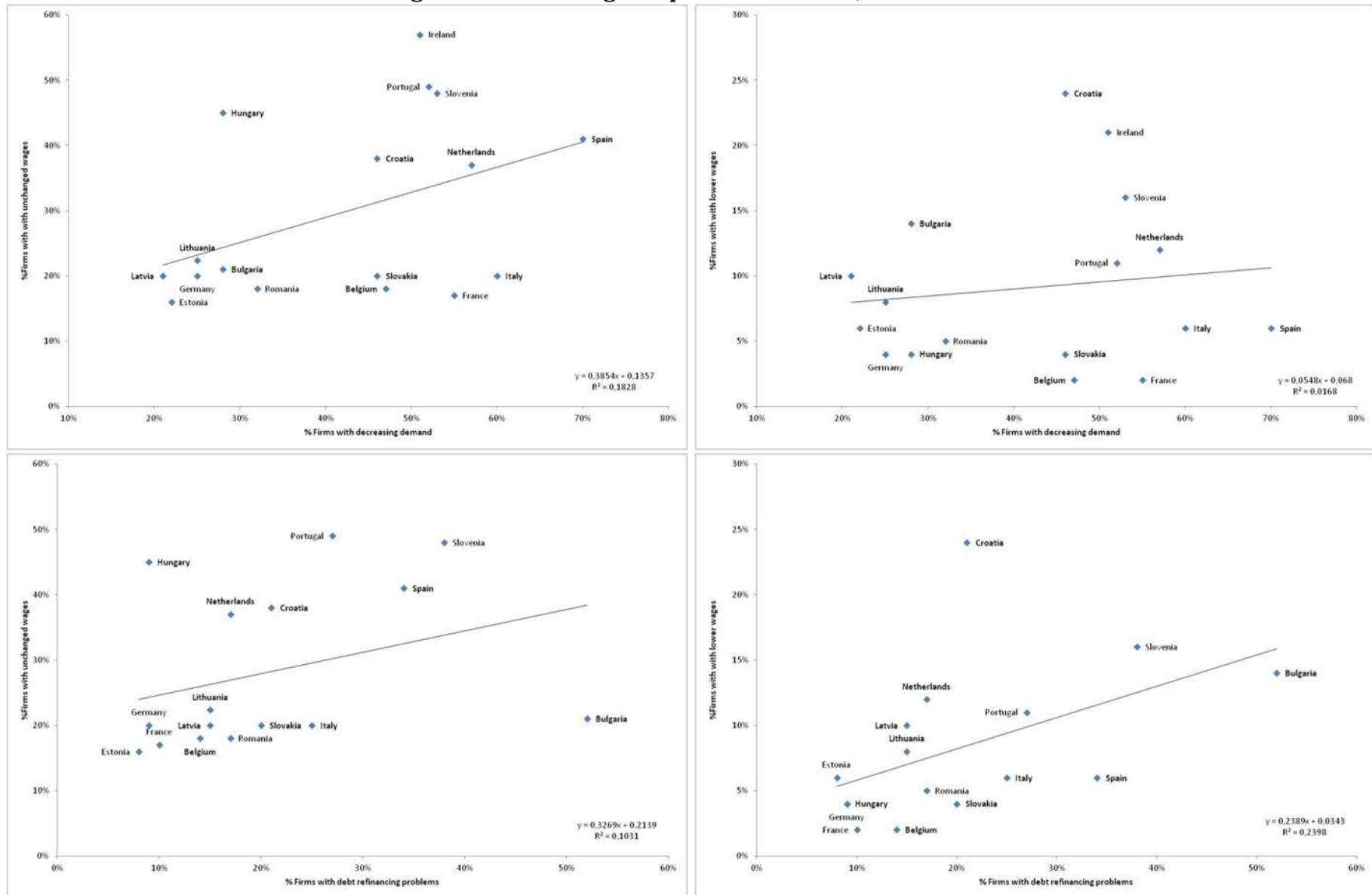


Figure 7. Sources of shocks during 2010-2013 according to firms' perceptions



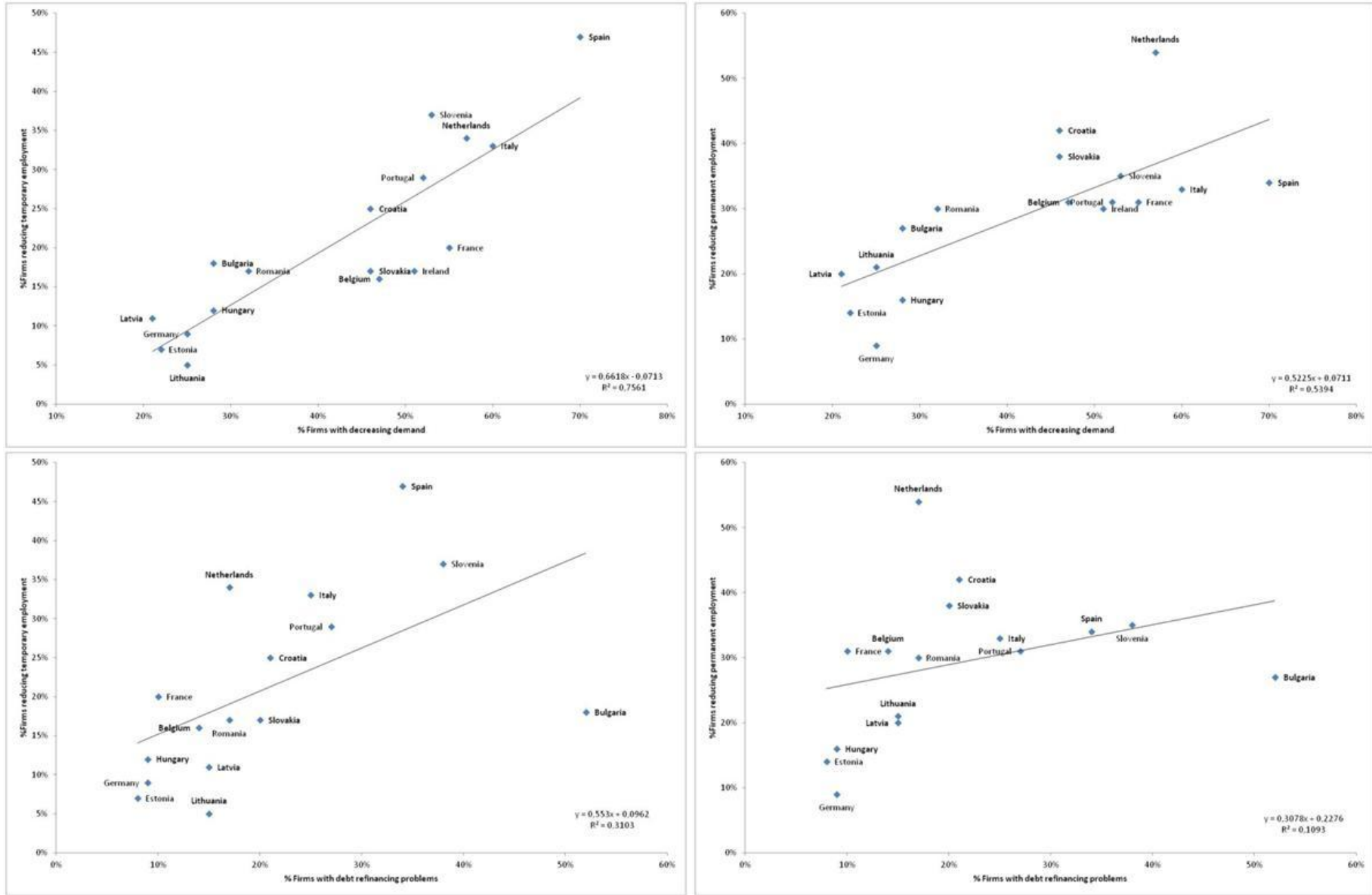
Notes: WDN, 3rd wave. *Very preliminary data.*

Figure 8a. Some wage responses to shocks, 2010-2013



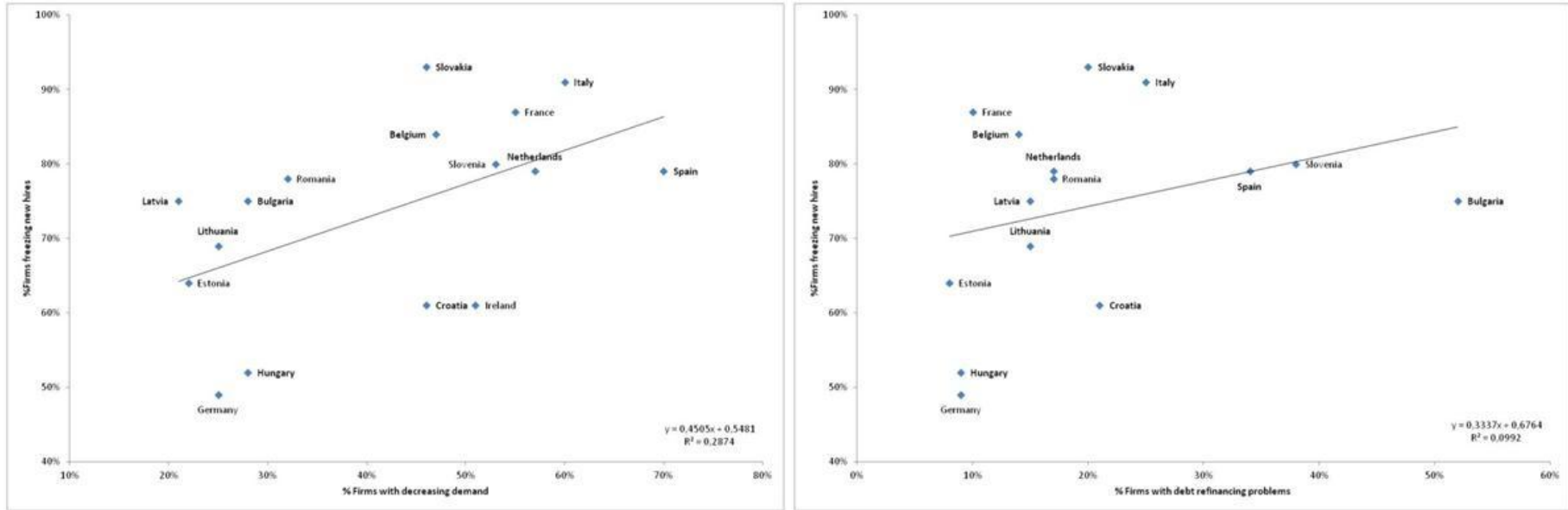
Notes: WDN, 3rd wave. *Very preliminary data.*

Figure 8b. Some employment responses to shocks, 2010-2013



Notes: WDN, 3rd wave. *Very preliminary data.*

Figure 8b. Some employment responses to shocks, 2010-2013 (continued)



Notes: WDN, 3rd wave. *Very preliminary data*

Figure 9

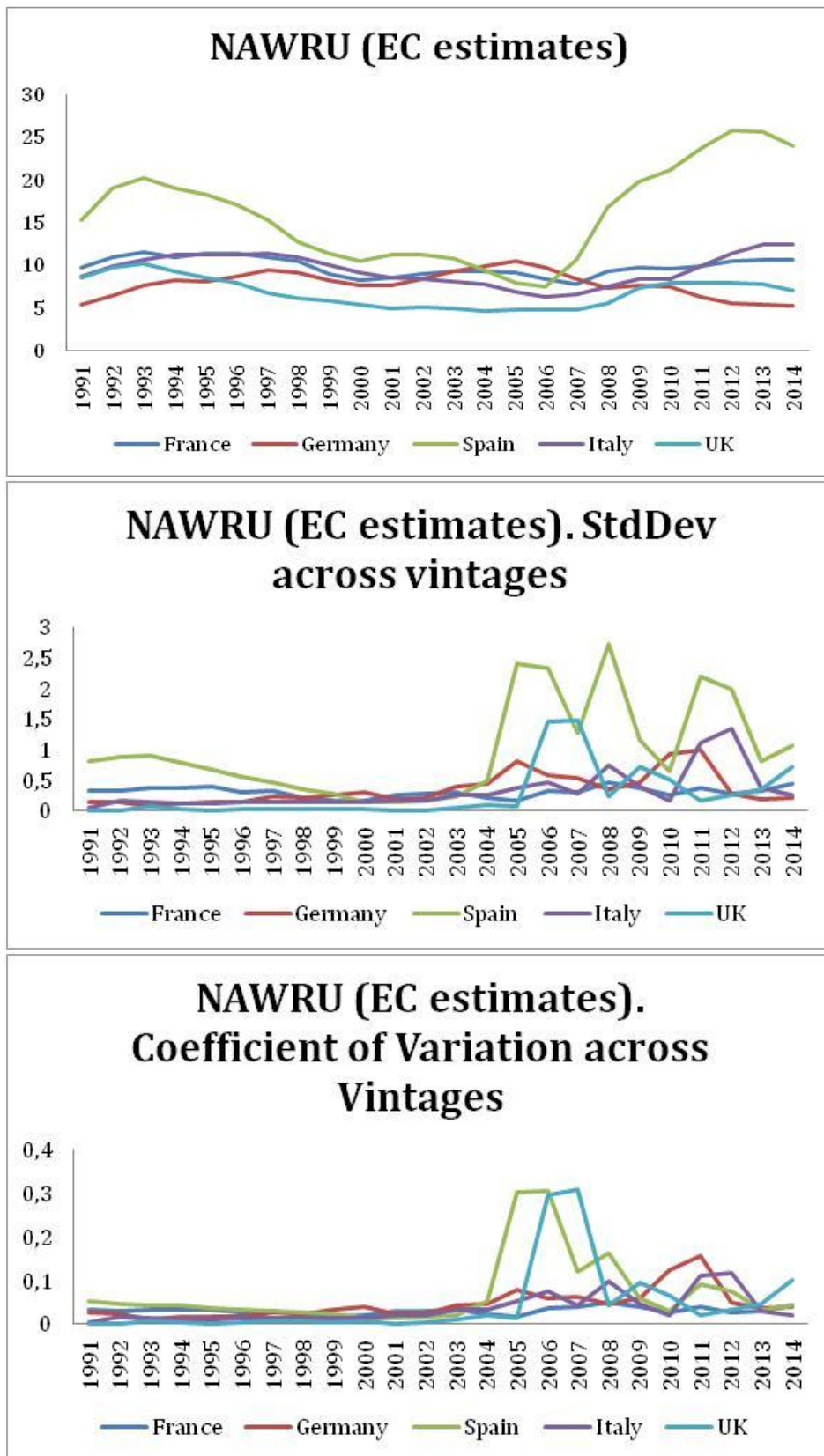


Figure 10. Youth unemployment (%) and employment rates (%) among older workers before (blue) and after the Great Recession (red)

