



Symposium Article

Comparing Labor Market Performance: Some Stylized Facts and Key Findings

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Comparative evidence based on key labor market performance indicators is discussed for the US, Japan and Europe in a long-run perspective and, especially, showing the impact of the financial crisis and Great Recession. As for Europe, the huge national and regional level differences are highlighted. In addition, some key findings on labor market performance raised by the empirical studies published in this issue are briefly presented in the wider context of the existing literature and their policy implications are explored.

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INTRODUCTION

In the half century before the current crisis, Europe, the US and Japan experienced quite different labor market performance, with the latter maintaining the best performance while the US outperformed Europe over the last three decades due to robust job creation. The labor market impact of the 2007–2008 financial crisis and the 2008–2009 Great Recession has been remarkable in developed economies, and noteworthy for its persistence in European countries, especially due to the 2010–2012 sovereign debt crises. Nevertheless, in Europe there are considerable cross-country differences in labor market performance that have persisted for some time, so that during



the recent crisis each country uniquely reflects its labor market institutions and initial pre-crisis conditions.

Innovative empirical research, investigating key structural, institutional and cyclical factors determining these differences among developed economies and within EU countries can significantly contribute to a better understanding of desirable economic and labor market policies and reforms for creating a highly longed-for virtuous model of growth, which would be able to create 'more and better jobs'.¹

The first part of this paper provides some perspective on the comparative labor market performance of the US, Japan and the European countries both for the past decades, but focusing on the crisis years. In the second part, recent empirical studies and results, including the papers published in this special issue, are presented in a wider context in order to highlight some key features and determinants of the long-run and recent performance of the developed economies and, especially, the European countries. The final section briefly highlights some policy implications.

COMPARATIVE EVIDENCE BASED ON SOME KEY LABOR MARKET PERFORMANCE INDICATORS

In a global perspective, the analysis of labor market performance is particularly complex and requires many indicators, all of which differ in their importance according to the level of development of a country. Thus, concepts like 'working poverty' and 'working vulnerability' are more important for less-developed or emerging economies while the unemployment rate (UR), the youth unemployment rate (YUR) and the employment rate (ER) are the key indicators in developed countries. In Table 1 some comparative statistics are presented for the main world regions, highlighting the changes that occurred between 2007 and 2010, that is, during the recent crisis.

This section briefly highlights the key comparative indicators for Europe, the US and Japan, that is, the main developed economies that have been much more deeply affected by the financial crisis and the Great Recession than have other regions of the world. Starting from a long-run perspective, that is, referring to the last five decades, it is possible to summarize the following key facts, mainly based on the UR (Table 2): (i) Japan persisted as

¹Since the early 1990s, that is, after almost two decades of 'Eurosclerosis' with persistently low-net job creation in Europe, European institutions promoted several documents and policy proposals for reforming the labor market including the Delors White Paper (European Commission, 1994); European Employment Strategy (1997); Lisbon Strategy (2000); and the Strategy for 'Europe 2020'.

Table 1: Labor market performance indicators in a global perspective

	Unemployment rate (%)		Youth unemployment rate (%)		Employment rate (%) ^a		Working poverty (%) ^b		Vulnerable employment (%) ^c	
	2007	2010	2007	2010	2007	2010	2007	2010	2007	2010
World	5.5	6.1	11.7	12.8	61.2	60.2	16.7	15.1	51.1	49.6
Developed economies and European Union	5.8	8.8	12.5	18.1	57.1	55.0	—	—	9.9	10.0
Central and South Eastern Europe	8.4	9.5	17.6	19.5	53.5	53.5	1.8	1.4	20.6	20.9
East Asia	3.8	4.1	8.0	8.8	71.3	70.4	10.9	8.1	54.8	49.6
South East Asia and the Pacific	5.5	4.8	14.9	13.6	66.2	66.7	14.5	11.4	62.3	62.3
South Asia	3.8	3.9	8.6	10.2	57.2	54.9	37.8	36.8	80.0	78.4
Latin America and the Caribbean	7.0	7.2	14.1	14.6	60.9	61.4	4.2	3.5	32.3	31.9
Middle East	10.3	9.9	24.9	25.4	42.6	42.7	1.6	1.1	31.0	29.8
North Africa	10.1	9.6	23.8	23.0	43.8	44.2	8.0	6.5	40.5	37.7
Sub-Saharan Africa	8.1	8.2	12.8	12.8	64.4	64.4	43.4	39.1	77.6	76.9

^a Employment rate calculate on overall population.

^b Working poverty is defined as employment with an income below US\$1.25.

^c Vulnerable employment defined as the self-employed without employees and unpaid family workers.

Source: ILO (2012)



**Table 2:** Unemployment rates: European countries, US and Japan (decade averages and recent years)

	1960–1970	1971–1980	1981–1990	1991–2000	2001–2010	2006	2007	2008	2009	2010	2011	2012*
EU-27	—	—	—	—	8.6	8.2	7.2	7.1	9.0	9.7	9.7	9.8
EU-15	2.2	4.0	8.5	9.2	8.0	7.8	7.1	7.2	9.2	9.6	9.5	9.7
Euro area (17)	—	—	—	—	8.7	8.5	7.6	7.6	9.6	10.1	10.2	10.1
United States	4.8	6.4	7.1	5.6	6.1	4.6	4.6	5.8	9.3	9.6	8.9	9.0
Japan	1.3	1.8	2.5	3.3	4.7	4.1	3.9	4.0	5.1	5.1	4.6	4.8
Austria	2.1	1.4	2.9	3.9	4.4	4.8	4.4	3.8	4.8	4.4	4.2*	4.5
Belgium	1.9	4.6	9.5	8.5	7.8	8.3	7.5	7.0	7.9	8.3	7.2	7.7
Bulgaria	—	—	—	—	11.2	9.0	6.9	5.6	6.8	10.2	11.1	11.3
Cyprus	—	—	—	—	4.6	4.6	4.0	3.6	5.3	6.2	7.8	7.5
Czech Republic	—	—	—	—	7.0	7.2	5.3	4.4	6.7	7.3	6.8	7.0
Denmark	1.1	3.6	6.9	6.6	4.9	3.9	3.8	3.3	6.0	7.4	7.6	7.3
Estonia	—	—	—	—	9.7	5.9	4.7	5.5	13.8	16.9	12.5	11.2
Finland	2.2	4.0	4.6	12.5	8.2	7.7	6.9	6.4	6.2	8.4	7.8	7.7
France	1.8	4.1	8.7	10.6	8.9	9.2	8.4	7.8	9.5	9.8	9.7	10.0
Germany**	0.6	2.2	6.0	7.8	8.8	10.3	8.7	7.5	7.8	7.1	5.9	5.8
Greece	5.0	2.2	6.4	9.5	9.8	8.9	8.3	7.7	9.5	12.6	16.6*	18.4
Hungary	—	—	—	—	7.5	7.5	7.4	7.8	10.0	11.2	10.9	11.0

Ireland	5.4	7.7	14.7	11.1	6.3	4.5	4.6	6.3	11.9	13.7	14.4	14.3
Italy	4.9	6.1	8.6	10.4	7.8	6.8	6.1	6.7	7.8	8.4	8.1*	8.2
Latvia	—	—	—	12.7	11.1	6.8	6.0	7.5	17.1	18.7	15.0*	13.5
Lithuania	—	—	—	7.5	10.9	5.6	4.3	5.8	13.7	17.8	15.4	13.3
Luxembourg	0.0	0.6	2.5	2.5	4.1	4.6	4.2	4.9	5.1	4.6	4.8	4.8
Malta	—	—	—	5.7	7.1	7.1	6.4	5.9	7.0	6.9	6.4	6.8
Netherlands	0.9	3.7	7.2	5.1	4.0	4.4	3.6	3.1	3.7	4.5	4.4	4.7
Poland	—	—	—	—	14.3	13.9	9.6	7.1	8.2	9.6	9.7	9.2
Portugal	2.4	5.1	7.3	5.7	8.2	7.8	8.1	7.7	9.6	12.0	12.9	13.6
Romania	—	—	—	—	7.1	7.3	6.4	5.8	6.9	7.3	7.4	7.8
Slovakia	—	—	—	—	15.1	13.4	11.1	9.5	12.0	14.4	13.4	13.2
Slovenia	—	—	—	—	6.1	6.0	4.9	4.4	5.9	7.3	8.1	8.4
Spain	2.4	5.4	15.6	15.7	11.9	8.5	8.3	11.3	18.0	20.1	21.7	20.9
Sweden	1.7	2.1	2.6	7.6	7.0	7.1	6.1	6.2	8.3	8.4	7.5	7.4
United Kingdom	1.7	3.8	9.5	7.9	5.6	5.4	5.3	5.6	7.6	7.8	8.1	8.6

Note: * European Commission, Autumn 2011, Forecasts; ** 1960–1991=West Germany.

Source: Eurostat online database (http://epp.eurostat.ec.europa.eu/portal/page/portal/statistics/search_database)





the best performing economy, notwithstanding a gradual increase in its UR; (ii) the US showed the worst initial performance but significantly improved its relative position in the following decades with remarkable net job creation, especially relative to Western Europe; (iii) after the two oil shocks of the 1970s, Europe entered a long phase of 'jobless growth' with persistently high URs until the mid-1990s, when a phase of 'low growth with net job creation' started and continued until the financial crisis and Great Recession.

Focusing on the most recent decades and on the impact of the crisis in the European context, it should be noted that the last 'job shock' hit both Western and Eastern European countries in a powerful but different way, although this happened after almost two decades of quite divergent trends in labor market performance. In fact, the old EU countries, especially since the mid-1990s, experienced significant net job creation accompanied by low productivity growth, thus moving from an intensive model of growth toward an extensive model, while new EU countries shifted, quite abruptly during the first years of 'transition recession', from an extensive model under central planning with high male and female ERs and low and stagnant productivity to an intensive model of growth, first losing jobs and gradually increasing productivity.² So, for Eastern European countries, the job shock after the latest crisis is the second one in less than a generation. Considering the more recent crisis years, the total UR in EU-27 increased from 7.1% in 2007 to 9.7% in 2010 and 2011, and it is expected to persist at a similar level in 2012.

Above, we refer to Europe as a single area, only distinguishing between West and East, but both long-run and recent evidence show that UR differences between countries within both these groups are significant. Focusing only on the current situation, the highest URs in 2011 are in Spain (21.7%), Greece (16.6%), Lithuania (15.4%), Ireland (14.4%), Slovakia (13.4%) and Portugal (12.9%); the lowest rates are in the Netherlands (4.4%), Austria (4.2%) and Germany (5.9%) (see Table 2).

Especially in some European countries like Italy, France, the UK and Germany, the regional differences in URs are remarkable (Figure 1). For example, in Italy, the regional URs ranged in 2010 from 14.7% in Sicily to 2.7% in Bolzano. So, in some countries the national UR is the result of very different regional rates. Moreover, the same total UR can be the result of very different levels of short-term and long-term unemployment. The long-term unemployment rate (LTUR) was persistently much higher in Europe than in the US and Japan, but the recent crisis reduced the difference between Europe and the US. The increase of LTUR was from 2.6% in 2008 to 3.9% in 2010 in the EU-27, while it rose from 0.6% to 2.8% in the US. An increase in LTUR

² See Marelli and Signorelli (2010a).

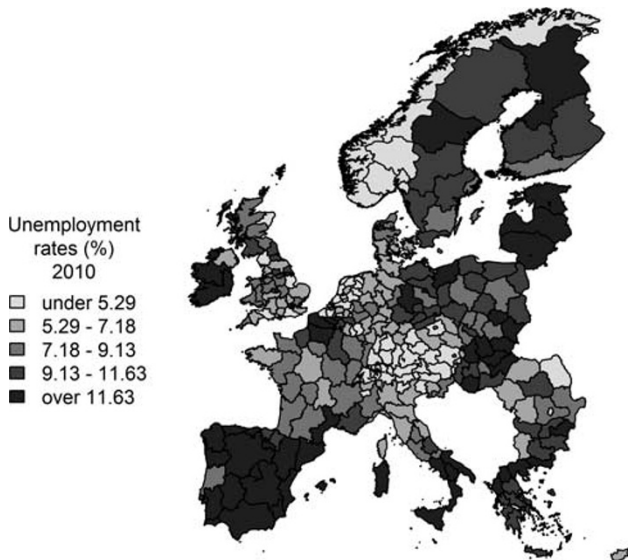


Figure 1: Regional Unemployment Rates in the EU in 2010.

Source: Created with the free software 'R' for statistical computing and graphics and based on the Eurostat online database http://epp.eurostat.ec.europa.eu/portal/page/portal/statistics/search_database

that recently occurred in many countries shows that some part of cyclical unemployment is turning into structural unemployment. Moreover, the differences in long-term unemployment in Europe are also noteworthy: in 2010, the LTUR was particularly high in Slovakia (9.2%), Latvia (8.4%), Estonia (7.7%), Lithuania (7.4%), Spain (7.3%) and Ireland (6.7%), while the lowest values were in Austria (1.1%), the Netherlands (1.2%), Denmark (1.4%) and Sweden (1.5%). The increase over 2008–2010 was particularly steep for Lithuania from 1.2% to 7.4%, Estonia from 1.7% to 7.7%, Latvia from 1.9% to 8.4%, Ireland from 1.7% to 6.7%, Spain from 2.0% to 7.3%, Slovakia from 6.6% to 9.2% and Greece from 3.6% to 5.7%. Much better changes, in the same period, occurred in Germany where LTUR declined from 4.0% to 3.4%, and in the Netherlands and Austria where it increased slightly from 1.1% to 1.2% and from 0.9% to 1.1%, respectively.

The same UR can be the result of very different UR compositions according to age classes. YUR is a more dramatic and persistent problem in Europe than in the US and, especially, in Japan.³ In the 1990s, the YUR

³ A higher youth unemployment rate is frequently associated with a lower participation rate. Thus, a higher share of young people are 'left behind' and are often trapped in a condition of 'neither in employment nor in education or training' (the so-called NEET group).

in the EU-15 was around 20%, much higher than in the US and Japan. In 2011, YUR was 21.4% in the EU-27, 17.3% in the US and 8.2% in Japan. The ratio between youth and total UR is around 2 in Europe. The YUR rates were also different among European countries. In 2011, the YUR was particularly low in the Netherlands (7.6%) and Germany (8.5%), but extremely high in Spain (46.4%), Slovakia (33.6%), Lithuania (32.9%), Greece (32.8% in 2010) and Italy (27.8% in 2010). The average increase in the period 2008–2010 was remarkable in several countries and some increase was recorded in most European countries with the exception of Germany.

The ER may be defined as the complement to the UR (divided by 100) multiplied by the participation rate:⁴

$$ER = \frac{E \times 100}{P_{20-64}} = \left(\frac{LF - U}{LF} \right) \times \frac{LF \times 100}{P_{20-64}} = \left(1 - \frac{UR}{100} \right) \times PR \quad (1)$$

So, the level of, and changes in, the ER are compatible with different levels and dynamics of the UR.⁵ For this reason, it is useful for a better comparative approach over time and between countries, to consider also the ER. In addition, the ER has become the key labor market performance indicator of the European Council's European Employment Strategy (EES) and of the Strategy for Europe 2020, in which the EU-27 objective is to have 75% of the 20–64 population employed by 2020.

It should be noted that, since the launch of the EES in 1997 and until the impact of the financial crisis, the ER in Europe increased appreciably, reducing the initially huge gap with respect the US and Japan (Table 3). As for the crisis years 2008–2010, the ER decline was –1.7% in the EU-27, from 70.3% to 68.6%, and –1.8% in the Eurozone from 70.2% to 68.4%. The ER reduction was much more pronounced (–4.8%) in the US and started a year earlier, falling from 75.3% in 2007 to 70.5% in 2010, while a slight reduction occurred in Japan from 75.3% to 74.7%.

As with the UR, but with a bigger magnitude, large cross-country differences in the ER exist in the European context. Considering the last available year, 2010, particularly high ER levels occurred in Sweden (78.7%), the Netherlands (76.8%), Denmark (76.1%), Austria (74.9%), Germany (74.9%), UK (73.6%); while the worst performing countries were Hungary (60.4%), Italy (61.1%), Spain (62.5%), Romania (63.3%) and Greece (64.0%).

⁴ Where: LF = Labour force = employment (E) + unemployment (U); UR = Unemployment rate = unemploymentx100/labour force; ER = Employment rate = employmentx100/population 20–64 (P_{20-64}); PR = Participation rate = labour forcex100/population 20–64.

⁵ Starting from Equation 1, the unemployment rate may be defined as $UR = (1 - ER/PR) \times 100$

Table 3: Total employment rates (selected and recent years)

	1992	1994	1997	2000	2003	2006	2007	2008	2009	2010	Target 2020
EU-27	—	—	65.1	66.6	67.0	69.0	69.9	70.3	69.0	68.6	75
EU-15	65.1	63.8	64.7	67.3	68.4	70.2	71.0	71.3	69.9	69.6	—
Euroarea-17	—	—	62.9	65.5	66.8	68.9	69.8	70.2	68.8	68.4	—
United States	73.6	74.7	76.5	76.9	74.5	75.3	75.3	74.5	71.3	70.5	—
Japan	76.2	75.3	75.5	74	73.2	74.5	75.3	75.3	74.5	74.7	—
Belgium	61.3	60.7	62.1	65.8	64.7	66.5	67.7	68	67.1	67.6	73.2
Bulgaria	—	—	—	55.3	58	65.1	68.4	70.7	68.8	65.4	76
Czech Republic	—	—	—	71	70.7	71.2	72	72.4	70.9	70.4	75
Denmark	75.7	74.1	76.4	78	77.3	79.4	79.2	79.8	77.8	76.1	80
Germany	68.9	67.5	66.9	68.8	68.4	71.1	72.9	74	74.2	74.9	77
Estonia	—	—	—	67.4	70	75.8	76.8	77	69.9	66.7	76
Ireland	57	59.2	63.6	70.4	70.6	73.4	73.8	72.3	66.7	64.9	69–71
Greece	58.7	59.4	60.5	61.9	63.6	65.7	66	66.5	65.8	64	70
Spain	53.6	50.8	54.2	60.7	64	68.7	69.5	68.3	63.7	62.5	74
France	65.6	64.6	65.2	67.8	69.7	69.3	69.8	70.4	69.4	69.1	75
Italy	—	55.5	55.1	57.4	60	62.5	62.8	63	61.7	61.1	67–69
Cyprus	—	—	—	72.3	75.4	75.8	76.8	76.5	75.7	75.4	75–77





Table 3: (continued)

	1992	1994	1997	2000	2003	2006	2007	2008	2009	2010	Target 2020
Latvia	—	—	—	63.5	68.9	73.5	75.2	75.8	67.1	65	73
Lithuania	—	—	—	65.6	68.9	71.6	72.9	72	67.2	64.4	72.8
Luxembourg	64.8	63.7	64.4	67.4	67.2	69.1	69.6	68.8	70.4	70.7	73
Hungary	—	—	58	61.2	62.4	62.6	62.6	61.9	60.5	60.4	75
Malta	—	—	—	57.2	57.8	57.6	58.5	59.1	58.8	60.1	62.9
Netherlands	66.4	66.5	70.9	74.3	75.2	76.3	77.8	78.9	78.8	76.8	80
Austria	—	70.6	70.6	71.4	72	73.2	74.4	75.1	74.7	74.9	77–78
Poland	—	—	65.3	61	57.1	60.1	62.7	65	64.9	64.6	71
Portugal	71.1	69.6	70.9	73.5	72.9	72.7	72.6	73.1	71.2	70.5	75
Romania	—	—	71.7	69.1	63.7	64.8	64.4	64.4	63.5	63.3	70
Slovenia	—	—	68	68.5	68.1	71.5	72.4	73	71.9	70.3	75
Slovakia	—	—	—	63.5	64.8	66	67.2	68.8	66.4	64.6	72
Finland	69.7	65.1	67.9	71.6	72.2	73.9	74.8	75.8	73.5	73	78
Sweden	81.1	75.5	74.6	77.7	77.9	78.8	80.1	80.4	78.3	78.7	well over 80
United Kingdom	70.5	70.6	72.6	74	74.7	75.2	75.2	75.2	73.9	73.6	No target
Norway	—	—	—	80.3	78.4	79.5	80.9	81.8	80.6	79.6	—

Source: Eurostat online database (http://epp.eurostat.ec.europa.eu/portal/page/portal/statistics/search_database)



The biggest declines in ER, in percentage points, starting from different levels in 2008 compared to 2010, occurred in Latvia (−10.8%), Estonia (−10.3%), Ireland (−7.2%), Spain (−5.8%), Lithuania (−5.6%) and Bulgaria (−5.3%).

The cross-country differences in the ER are partly explained by the differences in female ER and in the weight of irregular employment in the shadow economy. As for the female ER, in Europe it has significantly increased since the mid-1990s and it was not much affected by the crisis. The impact of the recent crisis was stronger in the US, which had a higher rate (65.6% in 2010) relative to the EU-27 (62.1%) and Japan (63.7%). In Europe, the cross-country differences in female ER are quite large, with the highest ER in Sweden (75.7%), Denmark (73.1%), Finland (71.5%) and the Netherlands (70.8%) and the lowest rates in Italy (49.5%), Greece (51.7%) and Spain (55.8%).

So-called irregular employment is difficult to estimate, but the shadow economy can be considered a proxy. The negative correlation between the latter and the regular ER (Figure 2) suggests that countries with a lower ER have higher levels of irregular employment in the shadow economy.

KEY DETERMINANTS OF LABOR MARKET PERFORMANCE: SOME RECENT EMPIRICAL RESULTS

The investigation of the determinants of labor market performance over time and across countries is one of the main research themes in economics, but it is extremely complex due to the many economic, institutional and social explanatory variables whose relative importance can change over time and which interact with each other. As a result, the existing theoretical and empirical literature regarding the determinants of labor market performance is extensive (eg, Nickell *et al.*, 2005; Blanchard, 2006). Here, we review a small part of that literature regarding developed countries with emphasis on some recent empirical results.

Institutions, flexibilities and policies

A first important part of the literature investigates the role of institutional variables, including employment protection legislation (EPL), sometimes distinguishing between several components, labor taxes, unemployment benefits, active labor market policies (ALMP), the structure of collective bargaining, the degree of unionization, the incidence of temporary and part-time contracts, liberalization of product markets and many others. Different empirical studies, by considering diverse country samples and/or periods and

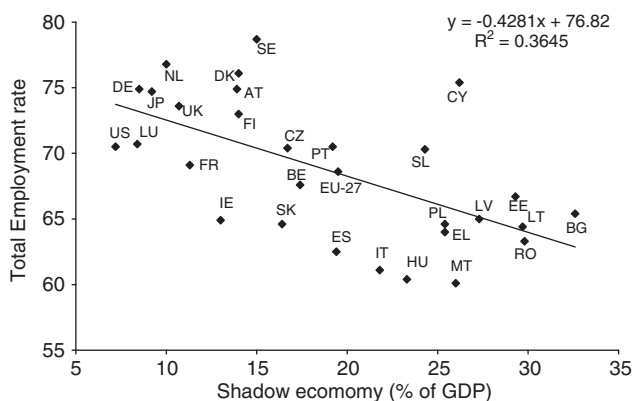


Figure 2: Correlation between Employment Rate and the Size of the Shadow Economy (2010).
Source: Total employment is from http://epp.eurostat.ec.europa.eu/portal/page/portal/statistics/search_ database. The shadow economy data are from Schneider (2012).
Legend: AT=Austria; BE=Belgium; BG=Bulgaria; CY=Cyprus; CZ=Czech Republic; DK=Denmark; EE=Estonia; FI=Finland; FR=France; DE=Germany; EL=Greece; HU=Hungary; IE=Ireland; IT=Italy; LT=Lithuania; LU=Luxemburg; MT=Malta; NL=Netherlands; PL=Poland; PT=Portugal; RO=Romania; SI=Slovenia; ES=Spain; SK=Slovakia; SE=Sweden; UK=United Kingdom

using various econometric techniques and models, reached different conclusions regarding the specific impact of some or all of the above institutional variables (eg, OECD, 1994; Scarpetta, 1996; Nickell, 1997; Signorelli, 1997; Garcilazo and Spiezia, 2007; Bassanini and Duval, 2009; Feldmann, 2009; Arpaia and Curci, 2010). Others combined institutions and sub-national level variables to explain regional (un)employment rate differences and dynamics (eg, Perugini and Signorelli, 2007 and 2010; Marelli *et al.*, 2012a; Demidova and Signorelli, 2012). The lagged level of unemployment is often added to control for a persistence effect. Blanchard and Wolfers (2000) focused on the interaction between institutional arrangements and economic shocks, while Belot and van Ours (2004) investigated the evolution of unemployment over time by interacting institutions and changes in institutions. Fiori *et al.* (2007) analyzed the role of product market reforms and Feldmann (2010) considered an ‘index of the economic freedom of the world’. While the negative impact on labor market performance due to the tax wedge on labor is largely verified by many studies (eg, OECD, 2006), as for the role of EPL and the different types of labor market flexibility, the results are mixed and the debate is still ongoing.⁶ In this issue, Bernal-Verdugo *et al.* (2012) analyze a panel of 97 countries for the

⁶ Naturally, all studies found a lower volatility over time of employment in high EPL countries.



period 1985–2008, controlling for possible endogeneity and reverse causality from unemployment to labor market institutions and find that improvements in labor market flexibility significantly reduce total, youth and long-term unemployment; in particular, hiring and firing regulations and hiring costs are found to have the strongest effect.

Eichhorst and Feil (2010) consider the complex role of labor market institutions during a negative shock by incorporating in their analysis different types of labor market flexibility and also by focusing on interactions between institutions, shocks and policies. In particular, they distinguish: (i) external numerical flexibility (dependent on EPL, the benefit system affecting labor supply, labor taxes); (ii) internal numerical flexibility (working time adjustments); (iii) external functional flexibility (occupational mobility, influenced by ALMP); (iv) internal functional flexibility (changing organization of production); and (v) wage flexibility. The literature on internal flexibility is still scarce, but the recent higher diffusion in several European countries of working time adjustments for mitigating the negative effects of the current crisis on employment levels, often favored by policy interventions, suggest the need for new studies. In this issue, Aricó and Stein (2012) analyze, for the very recent crisis years, the divergent effectiveness in Germany and Italy of short-time work schemes due to differences in the institutional set-up within which they operate and in the whole set of labor market policies adopted by each country. Also in this issue, Calavrezo and Lodin (2012) study the main characteristics of firms and employees involved in short-time working arrangements in France during the period 2007–2010 by using jointly firm-level data sets and the national labor force survey.

Another line of research, normally part of the debate on the role of institutions, regards the assessment of active and passive labor policies.⁷ The positive role played by effective ALMP in producing better labor market performance is largely confirmed by several studies (eg, Destefanis and Mastromatteo, 2010), while the debate is still open on the impact of passive labor policies (eg, Howell and Rehm, 2009), especially as regards the design of the unemployment benefit. In this issue, Corsini (2012) examines how unemployment insurance schemes and liquidity constraints affect reemployment probabilities in the cases of Finland, Italy and Poland, and investigates

⁷ In addition to the different kinds of labor policies, it should be recalled that all the other macro and micro policies directly or indirectly affect the labor market performance. In a macroeconomic perspective, in order to define effective policies, it is useful to determine if the existing unemployment is mainly ‘Keynesian’, due to lack of aggregate demand, or ‘classical’, due to high wages (Malinvaud, 1977), or ‘structural’ (Jackman and Roper, 1987).

whether these schemes, through employment services and search requirements, can offset the perverse effect of benefits on unemployment duration.

Structural and cyclical factors

In the long-run perspective, the ability of an economic area to have more and better jobs largely depends on the intensity and characteristics of economic growth and development and on the pattern of structural change, interacting with changes in the global division of labor. In this respect, sectoral and aggregate productivity dynamics (eg, Lilien, 1982; Kruger, 2008), together with demographic and migration trends (eg, Pissarides and McMaster, 1990) have a strong impact on the economic decline or growth of different regions, with a significant effect on labor market performance. In addition, during the past several decades, the change in the world division of labor has been significantly affected by the diffusion of new information technologies and by the globalization process, especially the expansion of international trade that favored the economic dynamism of the two giants, China and India, (eg, Hölscher *et al.*, 2010; Marelli and Signorelli, 2011) and of other emerging countries. As for developed economies, a large literature investigated the conditions favoring a ‘virtuous’ model of growth in which both employment and productivity, and consequently wages, have a high or at least adequate dynamic over time (eg, Marelli and Signorelli, 2010b). It should be noted that the current sovereign debt crisis in the Eurozone is occurring in the context of a longer-term comparative economic decline of the European continent, which has been unable to create a virtuous model of growth for several decades.

As for a short-run perspective, the literature largely debated the role of macroeconomic cyclical conditions in affecting labor market performance, mainly starting from different specifications of ‘Okun’s law’, that is, focusing on the relationship between GDP growth and changes in the UR (eg, Lee, 2000; Solow, 2000). More recently, IMF (2010) examined the role of institutions and policies in explaining changes in Okun’s law across countries and over time, while Bartolucci *et al.* (2011) estimated an extended Okun’s model able to detect the additional impact of financial crises on unemployment beyond the effect occurring through GDP changes. This additional impact is ascribed to the increase in systemic uncertainty. Considering that the short-run evolution of key variables like innovation, employment and productivity can have significant effects in the medium–long run, new studies investigating the cyclical dynamics are particularly important, especially in crisis times. In this issue, Lucchese and Pianta (2012) explore the way in which economic cycles influence the relationship between innovation and employment in the manufacturing industries of several European countries,



and they find that, in upswings, employment change is affected by new products, expanding exports and wage growth, while during downswings, new processes contribute to restructuring and job losses. Thus, unemployment and productivity growth can interact in different ways over the business cycle, and, in this issue, Marelli *et al.* (2012b) investigate the short-term joint dynamics of productivity and employment during economic down cycles in EU economies over the past 20 years, highlighting the peculiarities of the latest recession.

Segmentations and mismatches

In some theoretical models, labor is considered homogeneous, but a large empirical literature highlights the existence of labor market segments. Female labor market participation and segregation were investigated by, for example, Bettio (1988) and Signorelli *et al.* (2012), while a growing literature focuses on the determinants of the higher YUR relative to the other age classes. For example, Caroleo and Pastore (2007) stress the key role of the ‘youth experience gap’ in reducing the employability of young workers; in fact young people, despite a generally higher education, often lack the other two components of human capital: generic and job-specific work experience. In other words, educated young people need to acquire firm-specific knowledge through working activities for human capital created through formal education to become productive (Carmeci and Mauro, 2003). Also, the role of institutional variables, including school-to-work transition (STWT) processes, has been extensively analyzed (eg, Quintini and Manfredi, 2009; Ryan, 2001). However, studies investigating the impact of the crisis on youth labor market performance are still scarce (Choudhry *et al.*, 2012a, b), especially as regards the risk of creating a ‘lost generation’ due to the current crisis (Scarpetta *et al.*, 2010). In this issue, O’Higgins (2012) analyzes the effects of the Great Recession on young people’s labor market experiences in the European countries during the period 2008–2011, taking into account the role of different labor market institutions.

The existence of several mismatches between demand and supply in the labor market is partly related to segmentation and has been largely investigated in the theoretical and empirical literature (eg, Padoa-Schioppa Kostoris, 1991; Shimer, 2007). The simultaneous existence of job vacancies and unemployment, the so-called Beveridge curve, depends on the economic cycle (eg, Shimer, 2005), but the magnitude of unemployment and vacancies is remarkable in several European countries. As for educational and skill mismatches (eg, Allen and van der Velden, 2001), the relationship between educational system features, labor market characteristics and STWT institutions has been extensively analyzed, with studies on the timing and



nature of university-to-work transitions (eg, Schomburg and Teichler, 2011; Sciulli and Signorelli, 2011). However, the literature focusing, in a comparative perspective, on the size and consequences of over-education is still quite limited. In this issue, Croce and Ghignoni (2012) analyze the incidence of over-education of university graduates for a panel of European countries, and they show that cyclical conditions matter and that over-education operates as a short-term adjustment mechanism.

FINAL REMARKS

The negative impact of the 2007–2008 financial crisis and the 2008–2009 Great Recession on labor market performance has been undeniable in many developed countries, and its effects will persist in the Eurozone countries that have been hit by the 2010–2012 sovereign debt crises or by the risk of contagion and that have consequently adopted restrictive fiscal policies, and thus face the prospect of a long recession or stagnation.

While monetary policy, both at the national level and through international coordination, has been more or less successful so far in mitigating some of the effects of the crisis on aggregate economic performance, the same cannot be said of fiscal policy. In some countries, the existence of structural deficits and high levels of debt before the crisis precluded the use of expansionary fiscal policy. Within the EU, this limitation on the use of fiscal stimulus was exacerbated by the very small fiscal role of the ‘central government’ (the EU) and the overwhelming importance of national-level taxes and expenditures.⁸

Thus Europe, and especially the Eurozone, continues to face high systemic uncertainty. Further steps toward institutional and policy integration, such as the creation of the European Stability Mechanism and the implementation of the ‘Fiscal Compact’, are necessary, but may not be

⁸ Here the comparison between the EU and the US is telling. In the EU, countries remain responsible for most government activities, including national defense, foreign affairs, infrastructure, science and technology and so on and national public expenditure is around the 50% of GDP in EU countries, but EU countries are increasingly facing strict budget constraints and public debt sustainability conditions set by the market. Spending by the EU itself, on the other hand, is miniscule, near 1% of EU GDP. In the US, spending by the Federal government and by the states are about equal, and the central government has sole responsibility for many activities such as national defense, many infrastructure projects and so on, and thus it is better able to run deficits in the pursuit of a fiscal stimulus without facing the same market resistance to its expanded borrowing that individual states would face. Obviously, many other institutional differences exist between the US and the EU, for example, regarding the different potential and effective actions of the Federal Reserve relative to the European Central Bank.



sufficient, to reduce the risk of further contagion from the sovereign debt crisis and to increase the currently feeble GDP and employment growth prospects.⁹ That said, passive labor market policies to sustain jobs and labor incomes in the EU have, as several papers in this issue show, been effective in a number of countries and they enjoy greater social acceptance than do similar, though more limited, policies in the US.

The main conclusions of the papers presented in this issue can be briefly summarized as follows: (i) external flexibility, internal flexibility and labor policies have to be carefully designed looking at best practice, but taking into account the country-specific structural and institutional framework; (ii) short run complex dynamics of innovation, employment and productivity suggest policies for favoring a model of growth in which innovation is one of the key factors leading to employment and productivity dynamism; (iii) young people are the most vulnerable segment in the labor market in many European countries, and evidence suggests the need for targeted policies involving the design of the educational system and the STWT institutions in order to shorten the time for transition-to-work and to improve the education-to-job matching, thus increasing workers' job satisfaction and overall productivity.

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⁹In particular, the 'Fiscal Compact', with more effective European constraints on national public finance, can be a sort of pre-condition favoring the necessary well-designed institutional innovation introducing two new European financial instruments, Eurobonds: (i) 'project Eurobonds' for up to 6% of European GDP because today the EU budget is only 1% of the EU-27 GDP. This reflects the idea of J. Delors for realizing large-scale European investments in infrastructure, R&D and human capital, and thus favoring the necessary innovation, economic growth and net job creation; (ii) 'stability Eurobonds', transforming a part of the national debts in the Eurozone, for example, up to 60% of national GDP, into 'Eurozone guaranteed bonds', favoring an overall reduction in interest and in the risk of speculative attacks.



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