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TABLE OF CONTENTS

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Foreword

As a result of the global crisis, unemployment has been increasing rapidly around the world affecting disproportionately young and manual workers. The steep increase in unemployment has raised concerns that the cyclical increase in unemployment may to a large extend turn structural. This may result in a further **polarization of the labor market** with growing inequality, social exclusion and **increasing poverty**, affecting also the children of men and women losing jobs.

Despite the economy is emerging from recession with GDP growth turning positive again in the second half of this year, unemployment is expected to continue to increase in the coming quarters as discussed by **Konings and Raciborksi.** Using Okun's law it is forecasted that unemployment will reach a record high of **11.8% in the Euro area by 2012**. To avoid social exclusion and increasing poverty, it is clear that stepping up active labour market policies remains a key policy priority to avoid a 'jobless' recovery, one of the remaining risks for labour market developments in the medium term.

Jan Svejnar and **Vilem Semerak** discuss the situation in the New Member States, focusing on the **EU-10**. The economic downturn has led to a reversal of the gradual increase in unemployment that most of the EU-10 had been experiencing before the beginning of the crisis. Given the high dependence of the EU-10 on the EU-15, the increase in unemployment came later than in the EU-15 member states. A significant part of the adjustment has come in the form of a shorter workweek in most EU-10. The groups that are most negatively affected are foreign workers, less educated workers and minorities. The **policy recommendations** include (i) increasing flexibility of product and factor markets, which can help reduce the risk of hysteresis and jobless recovery, (ii) adjusting the regulation of immigration and social support and (iii) stimulating intra-EU migration.

The importance of flexibility is also nicely illustrated in the contribution of **Matteo Governatori**, who documents the process of labour turnover and flows in the EU. An easy reallocation of labour from declining to more profitable sectors and activities is important for the economic adjustment process in response to shocks and crises, but labour market regulation, such as employment protection legislation can hinder such a process.

A smooth reallocation process often means re-skilling of labour, in line with the future needs of the labour market. An obvious need, given the 'green' policies incorporated in the European Economic Recovery Plan, is the need for green jobs in the medium to long run. **Pierre Dechamps** highlights that a global transition to a low-carbon and sustainable economy can create large numbers of green jobs across many sectors of the economy. For instance, in Germany's renewable energy sectors between 1998 and 2006, 192 500 jobs were created. But green jobs go beyond the narrowly defined definition of jobs associated with 'green' energy, including jobs in legal and financial services. Thus, green jobs can be part of the solution to fight both the environmental and the economic crisis.

The global crisis also showed the vulnerability of particular groups in society, in particular foreign workers and migrants. **Stefano Bertozzi** tunes in on the latter and documents that in response to the crisis, countries of origin have implemented mainly three policy measures. The first was designed to help returnees fit back into the labour market in their home countries. The second was geared towards protecting the rights of migrant workers in host societies and the third was directed at identifying the least affected labour markets in the world.

The contribution of **Anna Melich** finally covers the attitudes towards unemployment in Europe, taken from the Eurobarometer opinions. In terms of work prospects, the most pessimistic are the Baltic States, the Slovak Republic, Bulgaria and Spain, while the most optimistic are the Netherlands, Luxemburg, Denmark and Austria. People also associate increased unemployment with increased poverty.

Jozef Konings

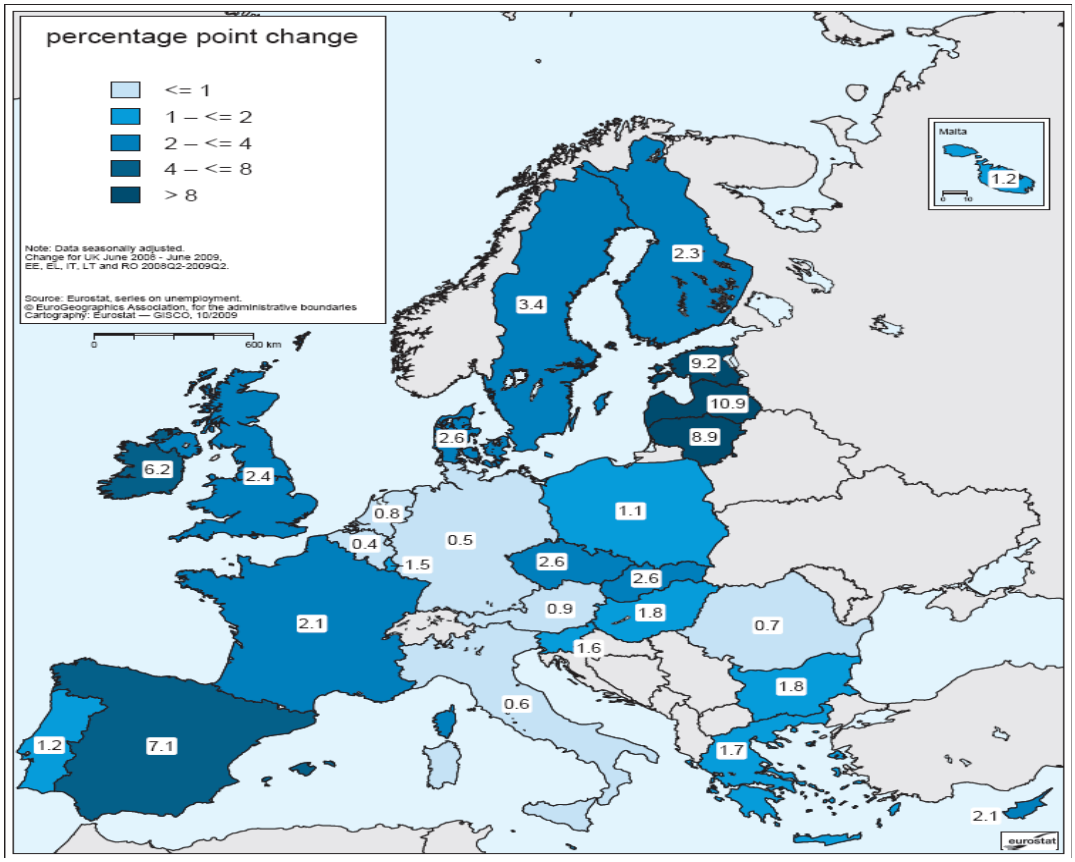
1. OKUN'S LAW: UNEMPLOYMENT AND GDP GROWTH[1]

by Jozef Konings (BEPA) & Rafal Raciborski (DG ECFIN)

1. Introduction

It is clear by now that one of the most severe consequences of the global crisis is its impact on unemployment. Unemployment has been increasing in all Member States, job vacancies are falling and companies continue to announce substantial job reductions across several sectors. As illustrated in Figure 1, the labour markets in Spain, Ireland and the Baltic States are particularly hard hit by the crisis with unemployment having increased by more than 6 percentage points within a year, reaching double digit numbers.

Figure 1: **Percentage point *changes* in the unemployment rate, August 2008-August 2009**



Source: Monthly Monitor, DG EMP, October 2009

The purpose of this article is to model the relationship between GDP growth and unemployment, known as Okun's law, to show that unemployment will continue to increase, even if the economy starts growing again. We then tune in on some policy concerns.

[1] This contribution also appeared in the BEPA monthly of November 2009. Okun's law was already discussed in an earlier BEPA note to the attention of the president, "Lessons from the stylised facts of labour market responses to the business cycle", 28 January 2009, BEPA/VG/PR D(2009)-G1

2. Forecasting Unemployment in the Euro Area

One of the stylized facts characterizing most Western economies is the negative relationship between GDP growth and changes in the unemployment rate, referred to as **Okun's law**. When applied over a long time spell it is often described with reference to the potential output or the natural rate of output an economy can generate. So when GDP growth in a country falls short of its potential, unemployment will increase and vice versa. Potential growth constitutes a summary indicator of the economy's capacity to generate sustainable, non-inflationary growth. Since potential growth is not observable it needs to be estimated, which is subject to significant forecast revisions[2]. The static correlation coefficient between GDP growth and the change in unemployment can vary between countries and the time frame considered, but a reasonable estimate of Okun's coefficient for the various countries in the Euro Area is -0.67[3]. This implies, for example, that a decline in GDP growth by 1 percentage point below potential GDP growth translates in an increase of 0.67 percentage point of unemployment. Okun's law is often used as an easy rule of thumb to assess how unemployment is likely to evolve. Using the interim forecast of DG ECFIN (released mid-September this year), which predicts that GDP growth in the Euro area will be -4.0% in 2009 (-0.1% in 2010), Okun's law suggests that unemployment will increase to 10.6% in 2009 and 11.1% in 2010[4].

However, this simple calculation ignores that unemployment reacts with a lag to changes in economic activity. An alternative way of describing Okun's law relies therefore on relating quarterly changes in unemployment to quarterly changes in real GDP, taking into account the lagged responses of changes in unemployment to changes in GDP. This is referred to as the **dynamic Okun's law**. Unemployment lags behind changes in GDP growth for a variety of reasons, including the tendency of many firms to resist firing workers because of the potential loss of essential employee-specific skills, hiring and firing costs and institutional factors. It follows that, even if the economy will start to pick up again, most countries may expect unemployment to continue to increase for some time.

We use a Vector Autoregressive (VAR) Model to estimate such a dynamic version[5], for which we use data from the first quarter 1995 until the second quarter of 2009. The first column of Table 1 shows the results of the model assuming two lags of GDP and unemployment. The second column is based on assuming a 4-quarters lag structure. As expected, an increase in the GDP growth rate has in both models a positive impact on future growth rates, and a dampening impact on unemployment. Furthermore, changes in unemployment have also an impact on the future unemployment rates. These two feed-back loops make the effect of the initial shock to GDP propagate many quarters into the future. Consequently, the unemployment rate is likely to keep increasing long after the initial negative shock to GDP growth has occurred.

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[2] For a discussion see DG ECFIN, Spring Economic Forecast, page 31.

[3] Own estimates and DG ECFIN, Havik, K. et al. (2008). "Labour Market Developments and Employment Policy Options at the current Juncture: a couple of considerations", briefing note European Growth and Jobs in 2009.

[4] Assuming potential output growth of 0.7% in 2009 and 0.7% in 2010, following the Spring forecast of ECFIN, page 31

[5] A VAR model refers to a vector autoregressive model, a popular model used in forecasting, but without any structural economic interpretation, see for example J.D. Hamilton, "Time Series Analysis", Princeton university Press (1994).

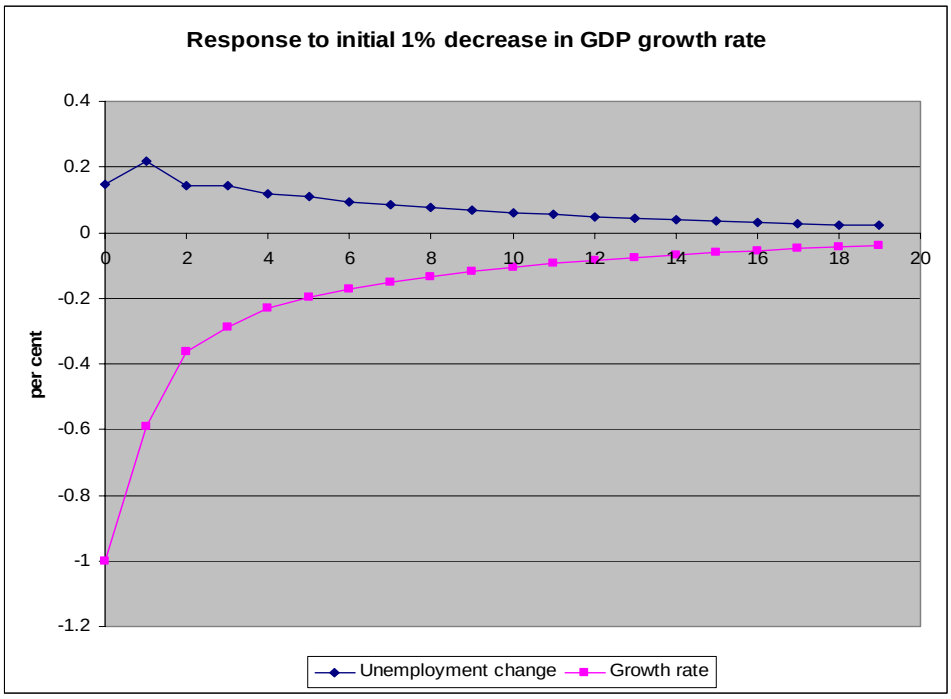
Table 1: **Okun's law for the Euro Area: VAR estimation results**

	VAR(2) dependent variable		VAR(4) dependent variable	
Explanatory variable	Growth rate GDP(t)	ΔUnemployment(t)	Growth rate GDP(t)	ΔUnemployment(t)
Growth rate GDP(t-1)	***0.55843***	***-0.17002***	0.35204	***-0.13870***
Growth rate GDP(t-2)	-0.08572	0.08865	-0.06716	*0.09621*
Growth rate GDP(t-3)			-0.18290	-0.05896
Growth rate GDP(t-4)			-0.24248	-0.05447
ΔUnemployment(t-1)	-0.21488	*0.32956*	-0.86989	*0.36184*
ΔUnemployment(t-2)	-0.48486	***0.39122***	*-1.60813*	***0.49091***
ΔUnemployment(t-3)			-0.31181	0.08090
ΔUN(t-4)			*1.45510*	***-0.40009***

Source: own calculations.
Growth rate GDP(t)=GDP growth rate in period t; ΔUN=unemployment(t)- unemployment(t-1)
Numbers in ***bold italics*** indicate statistical significance on the 5% confidence level.
Numbers in *italics* indicate statistical significance on the 10% confidence level.

In order to study such dynamic effects, one can apply the Impulse-Response Function (IRF) methodology, which allows us to assess the reaction of GDP growth and unemployment, in each quarter in response to a predefined shock to the economy. We will examine the effect of an initial 1% drop of the GDP growth rate on the future evolution of unemployment and GDP growth itself.[6] The results of this exercise for the VAR(2) model are demonstrated in Figure 2.[7] The change in the unemployment rate is estimated to increase at almost 0.2 percentage point one quarter after the initial shock, and to continue increasing at later dates, albeit at a diminishing pace. The cumulative impact after 12 quarters of such a shock on unemployment is 1.3 percentage points.

Figure 2

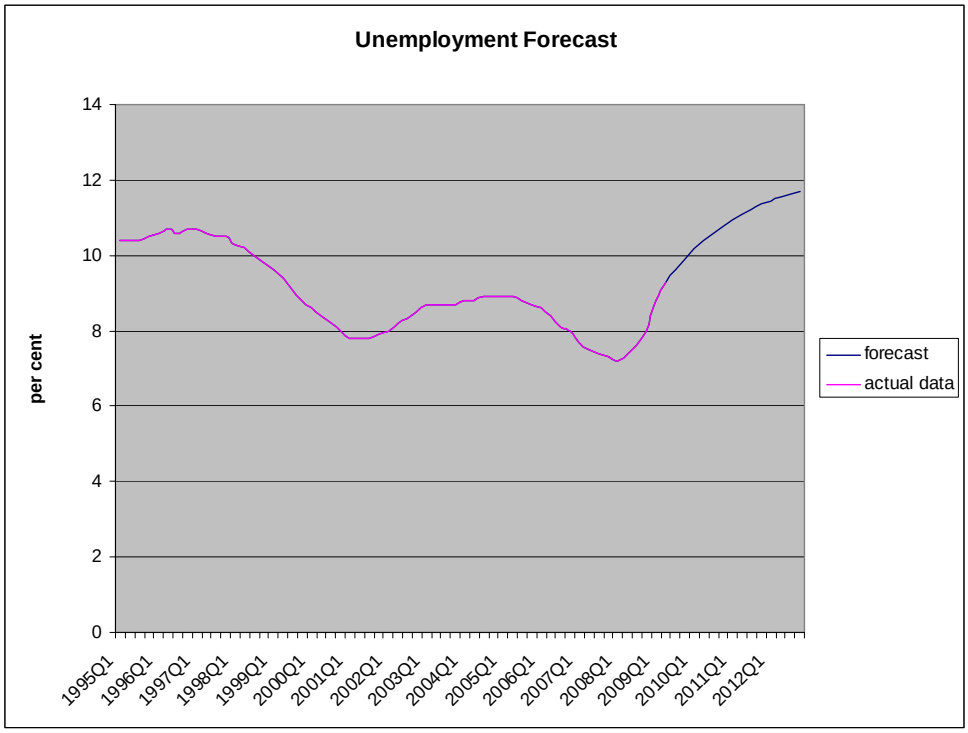


Source: Own computations

[6] Working with IRFs in a reduced-form VAR system like ours requires making some additional identification assumptions. Here we follow the tradition of applying the Cholesky decomposition in which a condition is imposed that changes in GDP can have immediate effect on the rate of unemployment but not vice versa.
[7] The VAR(2) model has been preferred over the VAR(4) on the basis of the favourable Schwartz Information Criterion as well as due to its greater parsimony. The residual obtained with the VAR(2) have been found to be well-behaved.

For very large shocks to GDP growth (as in the current crisis) the effect may be a substantial increase in the level of unemployment. We therefore use the VAR(2) model to generate forecasts for several periods ahead[8], as illustrated in Figure 3. The model suggests that unemployment in the Euro area will continue to rise beyond 2011, even though at a diminishing pace. The rate of unemployment is predicted to reach 11.8% by 2012. If this was to materialize unemployment would reach levels well above those reported in the late nineties. Of course, this is under the assumption that there are no additional shocks to the economy and that policy is unchanged. It is important to stress that this approach is a purely statistical approach without modelling the underlying structural parameters of the economy, which may change in response to policy. In particular, it is to be borne in mind that the validity of the forecast of the rate of unemployment hinges on the accuracy of the GDP growth prediction generated by the model. The simple VAR applied here may be less precise for as the forecast horizon increases. With the economy rebounding at a brisker-than-expected pace and adequate policy responses, prospects for unemployment would be somewhat better than predicted by our model. In fact, the latest Commission forecast released on 3 November[9] includes an upward revision of GDP growth in 2010 (from -0.1% to 0.6%) mainly thanks to previously unanticipated positive quarterly growth in the second half of 2009. However, even a GDP growth rate of 0.6% is well below the usual reference path of GDP growth, which – based on Okun's law – implies that unemployment will still increase.

Figure 3



Source: own computations.

3. Policy concerns

An important concern when unemployment increases is that it may become persistent with a risk of a permanent increase in structural unemployment as was the case in the 1980s. As argued by Lawrence Ball in a recent paper[10], if we want to know why unemployment rose in

[8] The DG ECFIN interim forecast for the third and fourth quarter GDP growth are used in this experiment.
[9] The forecast came out after the model in this brief was estimated.
[10] Ball, L. (2009). "Hysteresis in Unemployment: Old and new evidence", NBER working paper 14818.

much of Europe in the 1980s, one needs to understand the underlying dynamics of unemployment. In particular, some authors have emphasized **the insider-outsider theory**. When workers become unemployed, the remaining employed workers increase their wage targets, preventing the unemployed from getting their jobs back. But also when support measures are taken to protect declining sectors, an advantage is created for the insiders at the expense of the outsiders. Another explanation is related to the **duration of the unemployment spell**. When people stay too long into unemployment they become detached from the labour market. These workers are unattractive to employers, or they do not try hard enough to find jobs as they get discouraged. This is how the skill depreciation process starts. These effects seem to occur more frequently in countries with long-lived unemployment benefits and limited activation policies.

In this context, it would be useful to develop **stress tests for social systems,** pointing out which ones cope better with the crisis and are compatible with long run objectives of creating a dynamic and competitive labour market[11]. It is clear, however, that the main focus should be on how **to find people new jobs**. This requires firms that can easily restructure, but also smooth transitions of workers flowing in and out of unemployment. Flexibly moving from one job to another, however, requires **flexible skills**. Active labour market policy, focusing on training and education, on-the-job training and on young labour market participants seem more important than ever.

2. NEW MEMBER COUNTRIES' LABOUR MARKETS DURING THE CRISIS

by Jan Svejnar and Vilem Semerak[12]

The present contribution is devoted to labour markets in New Member Countries, in particular the EU-10, during the crisis. The focus is on the most recent evolution of unemployment and its constituting elements: flows into and out of unemployment. The main findings, based on recent quarterly and monthly data, may be summarized as follows:

1. Registered unemployment is considerably higher than before the crisis and it is still rising. However, in most countries the unemployment rate is not yet at the maximum levels reached earlier in the 2000s and will not be approaching these maxima in the near future.
2. The response of the labour markets to the crisis has been more complex than in the past downturns: a significant part of the adjustment has come in the form of a shorter workweek. As a result, employment has contracted less than aggregate economic activity but underemployment has risen.
3. Adjustment in the form of shorter workweeks and/or underemployment may be temporary and can evolve into increase in open unemployment.
4. The greatest increase in EU-10 registered unemployment occurred around the first quarter of 2009. Data on inflow and outflow into unemployment suggest subsequent stabilization which, however, may be temporary.

[11] Also the OECD in their recent Employment Outlook (2009) suggests developing stress tests for labour market policy

[12] CERGE-EI, Prague and University of Michigan

5. The structure of employment is also changing in that we observe a higher share of short-term contracts and increased regional labor mobility. The share of long-term unemployment has dropped temporarily because of the high inflow of the newly unemployed. The crisis has so far not led to a marked increase in economically inactive population.
6. In countries for which August-October 2009 monthly data are available, one observes recent improvements in the functioning of the labour markets in that there is higher labor mobility and greater willingness to accept offered position.
7. The groups that are most negatively affected in the labour market are foreign workers, less educated workers and minorities. The employment rate of university educated people has in fact risen, while that of the less educated has fallen, similarly to the situation in most EU countries. Social exclusion as a result of the crisis is therefore a serious concern.
8. Risks: The greatest risks are (a) a protracted W- or L-shaped economic recovery in EU15, (b) rising long-term un(der)employment accompanied by hysteresis, and (c) fiscal imbalances brought about by (a) and (b) above.

1. Economic environment in the new member countries

EU-10 were affected by the financial crisis later than the older EU members and the effect came through somewhat different channels. In particular, the financial institutions of EU-10 mostly avoided the first stage of the crisis because of their low exposure to U.S. toxic assets. Yet, the countries could not avoid a dramatic drop in the demand for their exports and the contractionary effects of frozen international capital markets. The negative export effects have been particularly strong because EU-10 are very open to trade. Hence, the high export orientation that helped these economies achieve above average growth rates before the crisis has contributed to the severe downturn during the crisis. Although this negative effect influenced all the EU-10, the resulting changes in economic activity were differentiated – countries with worse initial macroeconomic situation (fiscal imbalances), higher shares of foreign currency denominated debt, and inflexible exchange rate regimes were more vulnerable and had more limited options in mitigating the effects of the crisis. As a result, while the Baltic countries have been among the worst hit, other countries, such as Slovenia, Poland, and Czech Republic, have experienced a milder increase in unemployment.

2. Changes in employment and unemployment

The economic downturn has led to a reversal of the gradual decrease in unemployment that most of the EU-10 countries had been experiencing before the beginning of the crisis. Given the dependence of EU-10 on demand within EU15, with the exception of Hungary the rise in unemployment came slightly later in EU-10 than in the EU 15 countries (see Figure 4 and Figure 5). Since unemployment is a lagging indicator, within each country its rise has also followed by several months the fall in output.

Figure 4 – **Monthly data on total unemployment (Eurostat, seas. adjusted)**

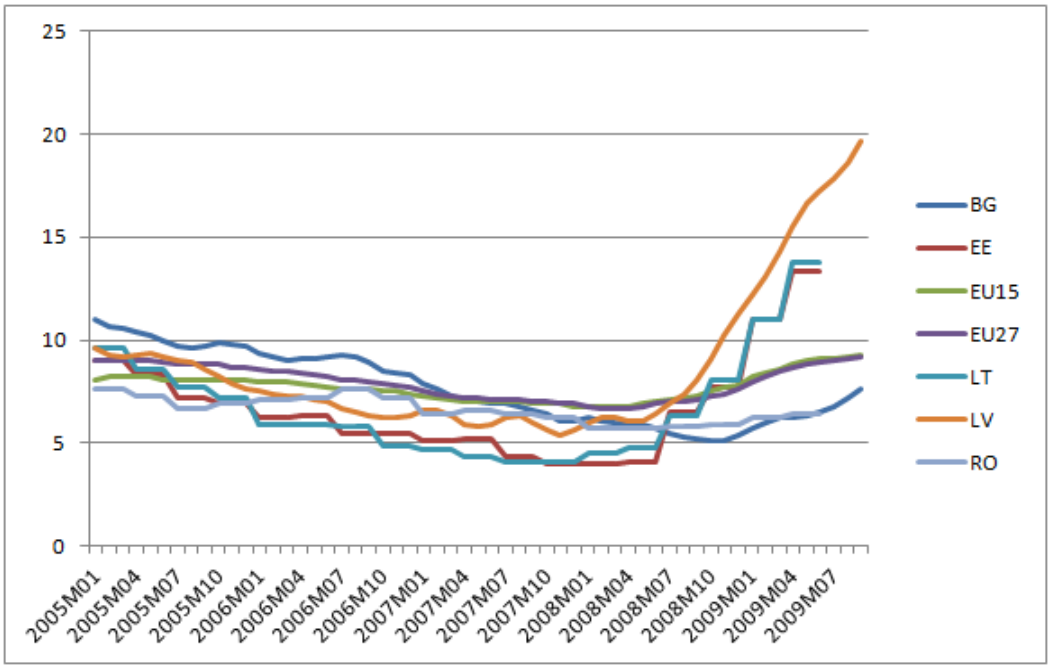
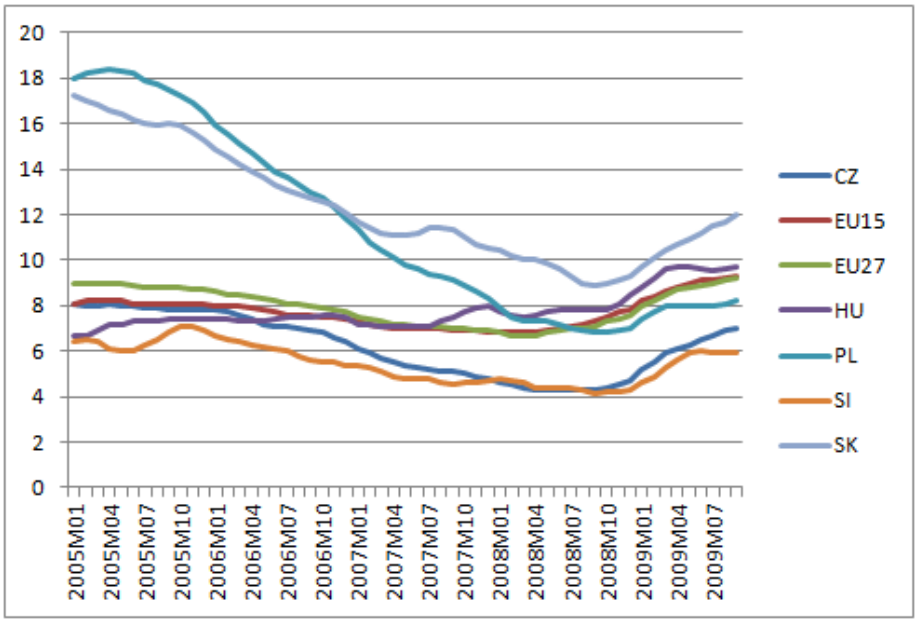
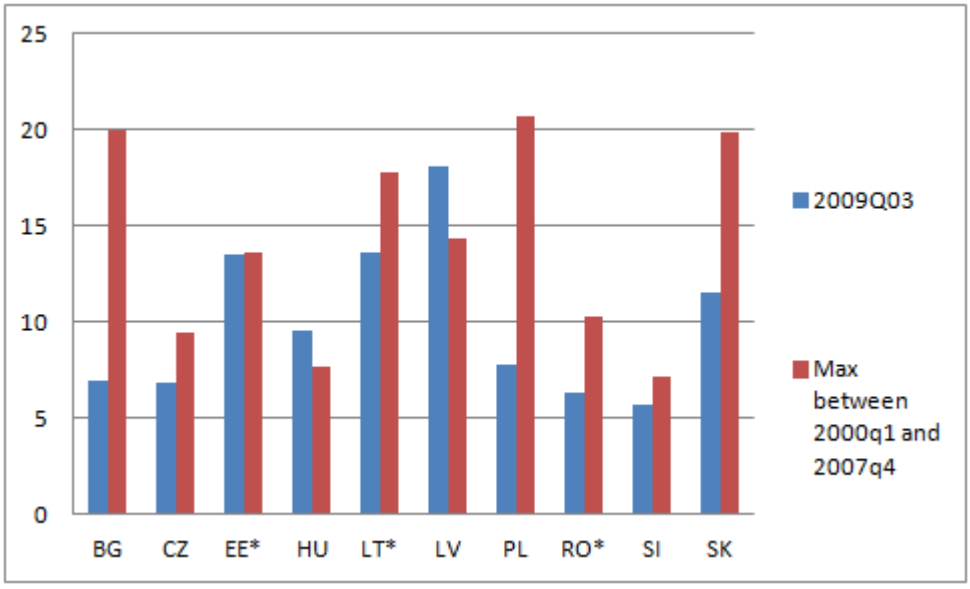


Figure 5– **Monthly data on total unemployment (Eurostat, seas. adjusted)**



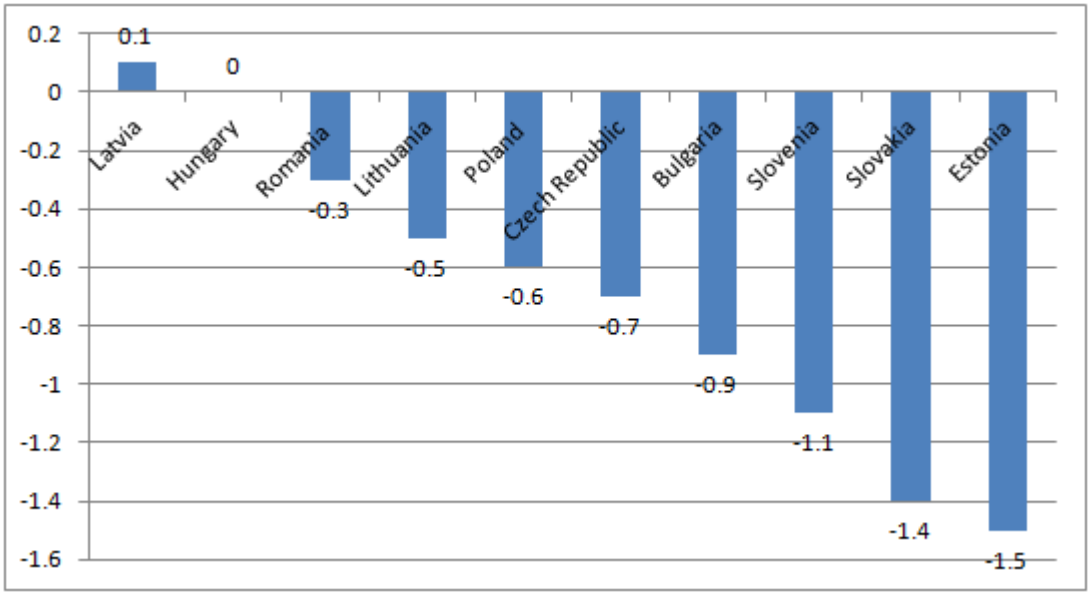
Judging from the unemployment rates alone, the situation in the new Member States (other than the Baltic countries) is serious but not yet critical. Indeed, half of the countries have lower unemployment rates than the EU 15 average, and with the exception of Hungary and Latvia, they have lower unemployment than they had earlier in this decade (see Figures 4, 5 and 6).

Figure 6 - **Current unemployment versus maximum between 1st quarter of 2000 and 4th quarter of 2008 (* data for 2000q2). Eurostat NSA data**



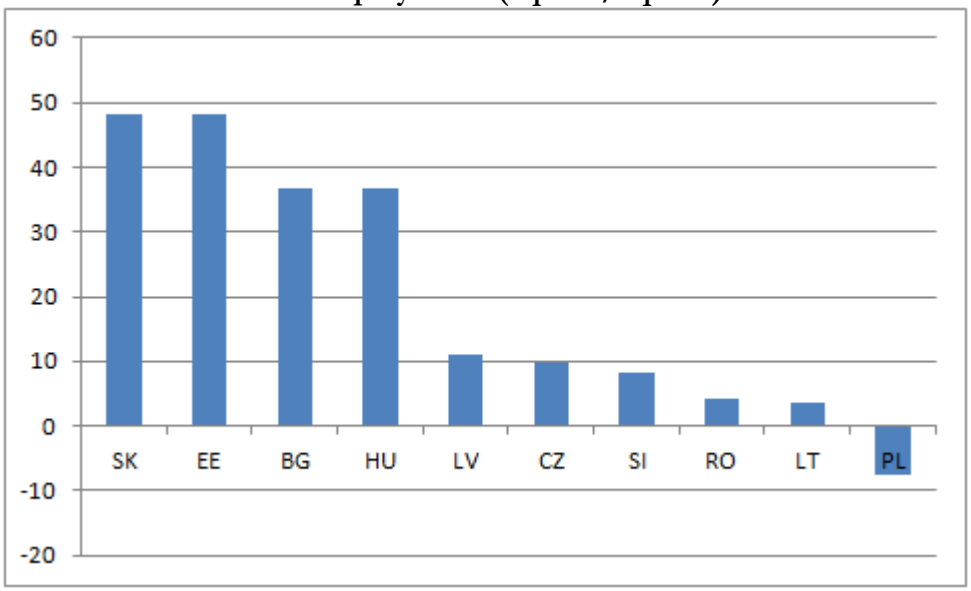
There are two other factors that have so far mitigated the increase in official unemployment: (i) an adjustment in the form of greater reliance on shorter working hours and (ii) a greater role of migrant (foreign) workers and unofficial (informal) employment. As may be seen from Figure 7, the average number of hours worked per week has declined in all the EU-10 except Latvia and Hungary, with the decline being most pronounced in Estonia, Slovakia and Slovenia. In most of these economies, underemployment has thus become a problem that exacerbates that of measured unemployment. Migrant (foreign) workers employed in low skilled jobs have been among the first to be laid off and in a number of countries they are not counted among the unemployed even if they stay (often illegally) in the host country; in some cases they report themselves as entrepreneurs rather than unemployed. Together with some of the domestic unemployed workers, they join the informal sector, evade paying taxes and some lack social protection.

Figure 7 - **Change in average hours worked per week 2009Q2-2008Q2**



Finally, with the exception of Poland, all EU-10 have witnessed a rise in the use of part-time employment contracts (see Figure 8). While providing greater flexibility to firms and enabling more of them to survive, this shift tends to reduce the job security and hence welfare of workers. This trend is also related to existing inflexibilities of the labour markets – in the presence of firing restrictions and unpredictable demand, many firms can prefer to hire new workers on temporary rather than permanent contracts.

Figure 8 - **Relative change (%) in the share of part-time contracts in total employment (2q2009/2q2008)**



3. Future developments: risks and opportunities

The main factor that will determine the level of unemployment and other economic indicators in the EU-10 is the speed of economic recovery in EU 15. The response of the EU-10 labour markets to the crisis to date suggests that the unemployment situation will worsen if the EU15 recovery turns out to be very slow.

The danger is a rise in long term unemployment, with its accompanying negative economic, social and psychological effects. Current data suggest that the relative share of long-term unemployment is decreasing, but that is a statistical effect caused by high inflows of newly (and therefore initially short-term) unemployed. In view of the European experience over the last several decades, one also cannot rule out hysteresis in the sense that it will be difficult to bring down a high unemployment rate once it is firmly established and institutions adjust to it.

On the fiscal side, a prolonged period of high unemployment will exert great pressure on the already strained budgets of the EU-10. The Baltic countries rank among the most seriously affected countries and also the countries that may face most serious political risks. They have experienced major tensions related to the situation of the population of Russian origin. High rates of unemployment together with asymmetric impacts of unemployment can increase the risks of political destabilization.

On the positive side, the crisis appears to have increased the mobility of labour. Anecdotic evidence suggests increasing willingness of people to commute and relocate to places with better chances of obtaining work, even in countries with relatively "passive" population (e.g., the Czech Republic). The greater willingness to move is offset, however, by the negative effects of financing constraints on residential investment.

There is also an opportunity to use the crisis as a motivator to reduce excessive regulation that has been hampering efficiency and thus lowering the level of economic activity and consumer optimism.

4. Policy Recommendations

Sensible adjustments in economic policies can lower the risk of a protracted recession and enhance the speed of recovery. In particular:

1. Increasing the flexibility of product and factor markets can help reduce the risk of hysteresis and "jobless recovery".
2. Adjusting the regulation of immigration and social support may reduce the extent to which foreign workers are "pushed" into black market activities when they lose work.
3. Stimulating intra-EU migration may alleviate the hardship of workers in the most crisis-affected countries, while equalizing EU-wide demand and supply for labor.

5. References

Cut-off date for statistical data: November 6th 2009

Eurostat statistics
Labour Force Survey data
National Accounts data

National labour market statistics
Austria
- Arbeitsmarktservice Österreich

Bulgaria
- Statistics of Ministry of Labour and Social Policy – National Employment Agency

Czech Republic
- Czech Statistical Office (CSU)
- Statistics of the Ministry of Labour and Social Affairs

Estonia
- Ministry of Social Affairs

Hungary
- Hungarian Employment Office

Latvia
- State Employment Agency

Lithuania
- Ministry of Social Security and Labour – Lithuanian Labour Exchange

Poland
- Publiczne Sluzby Zatrudenia

Romania
- Agentia Nationala Pentru Ocuparea Fortei De Munca

Slovakia
- Statisticky urad Slovenskej republiky (SUSR)
- Ústredie práce, sociálnych vecí a rodiny

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3. LABOUR MARKET FLOWS, TRANSITIONS AND UNEMPLOYMENT DURATION

by Matteo Governatori (DG EMPL)

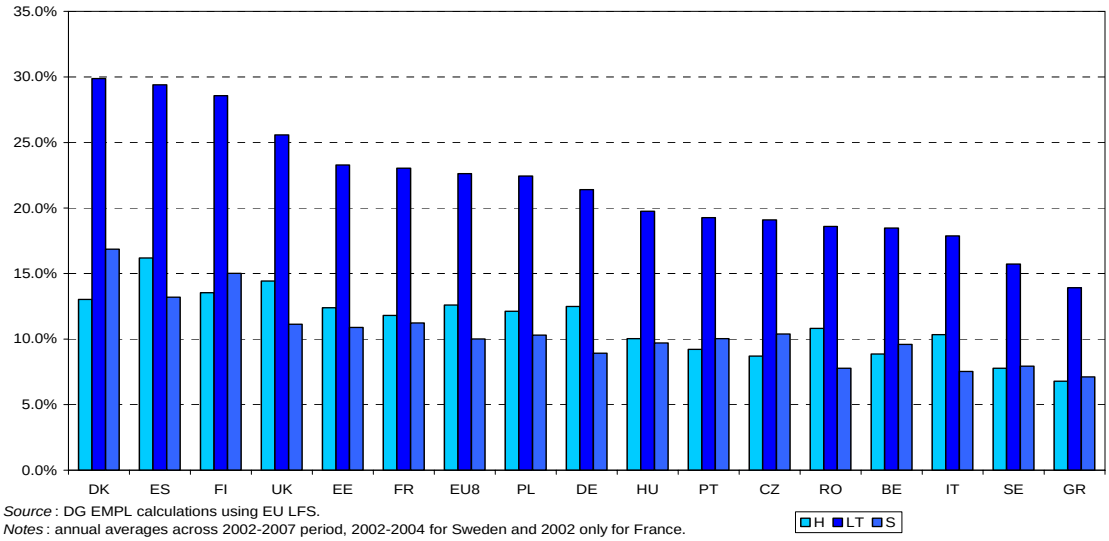
Labour market performance is commonly assessed on the basis of employment and unemployment rates. However, two economies with similar unemployment rate may be very different in terms of overall labour market dynamics with, for instance, one having large flows in and out of unemployment combined with low unemployment duration while the reverse occurs in the other. Hence, the functioning of labour markets can be fully grasped only by looking at indicators of flows and unemployment duration. In every economy, jobs are simultaneously created and destroyed as labour inputs are continuously reallocated from declining to more profitable sectors and activities. On the other hand, workers change jobs or move in and out of employment not only as a result of firms' decision, but also voluntarily, in search for better working conditions or to cope with private responsibilities. The scale of such flows provides information on the flexibility or dynamism of a labour market and, hence, on its capability to swiftly allocate labour to its most productive use.

1. Hirings, Separations and Labour Turnover in the EU

Gross flows can be measured by the job turnover, i.e. the number of jobs created and destroyed over a certain time period, and by the labour turnover, i.e. the number of workers changing jobs or moving in and out of employment. Harmonised figures for job turnover cannot be produced at the EU level due to the lack of suitable firm-level data. However, annual labour turnover can be calculated based on the EU Labour Force Survey (LFS). These calculations show that labour flows are quite large in the EU (chart 1), as between one fifth and one quarter of all European workers (22%) separate from their current job and/or are hired to a new one every year[13]. Such dynamism concerns all Member States, albeit to a different degree, as labour turnover ranges from 14% of total employment in Greece and 16% in Sweden to between 25% and 30% in the UK, Finland, Spain and Denmark.

[13] Annual average for the period 2002-2007 and for an aggregate of 8 EU Member States (Belgium, Germany, Denmark, Greece, Spain, Italy, Portugal and the UK).

Chart 1: hirings, separations and labour turnover (% of employment)

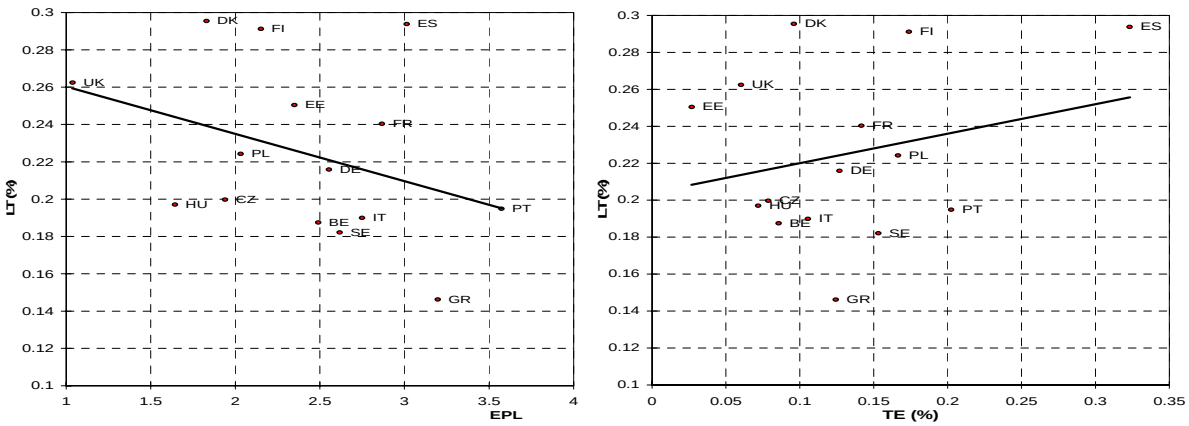


Source : DG EMPL calculations using EU LFS.
Notes : annual averages across 2002-2007 period, 2002-2004 for Sweden and 2002 only for France.

Workers have different probabilities of participating in labour flows according to their main characteristics. Flows for women, young workers (15-24) and workers with lower education tend to be higher, with the difference by age being particularly striking, as turnover for young workers stand at about 70% of their employment level. Labour turnover also varies according to firms' characteristics, with sectoral differences explaining a much larger fraction of overall variability in EU hiring rates than differences between countries or the economic cycle. This underlies the importance of sector-specific technological, organisational and demand factors in driving labour dynamics.

Country effects also play a role though, suggesting a non negligible impact of labour market policies on employment dynamics. Member States with less stringent employment protection legislation, such as the UK and Denmark, or with a higher share of temporary employment, such as Spain, tend to have higher labour turnover rates (chart 2). It is, however, difficult to draw definite conclusions about the desired or 'optimal' levels of labour turnover. While more rigid labour market institutions tend to create obstacles to the reallocation of labour from declining to expanding activities, high labour turnover can also be associated with welfare costs, such as recruitment costs and loss of specific human capital for firms, reduced access to training for workers (with adverse effects on labour productivity at macro level) and higher spending on unemployment benefits.

Chart 2: labour turnover, employment protection legislation and temporary employment



Source : DG EMPL calculations using EU LFS and OECD data.
Notes : Labour Turnover and % of Temporary Employment: Averages for 2000-2005. EPL: average of 1998 and 2003 figures.

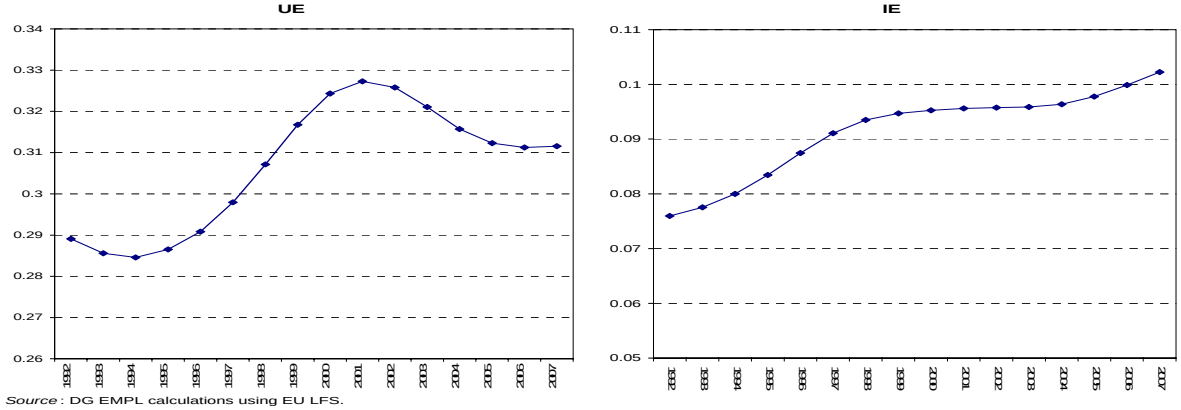
2. Trends in Transitions from Unemployment to Employment

In addition to turnover, employment dynamics can be measured through transition rates by employment status (employment, unemployment and inactivity), type of employment (such as temporary vs. permanent employment) and pay level. Whereas turnover essentially measures the overall scale of labour market dynamics, transition rates provide information on their 'quality', i.e. on the prevalence of 'good' versus 'bad' moves. Based on the LFS, annual transition rates by employment status can be calculated. Among those, transitions from unemployment and inactivity to employment (UE and IE) are associated to improved labour market attachment and hence are the main focus of the current analysis.

In line with evidence for labour turnover, the EU is characterised by relatively large annual transition rates. On average during the period 2002–07, nearly a third of unemployed people, and about 10% of inactive people, found a job in the following year. These figures mask, though, substantial country differences, with UE transition rates ranging from 40% or more in the UK, Spain, Portugal and the Netherlands to 25% or below in Germany, Greece, Poland and Belgium; while, IE rates range from 15% or more in Sweden, the UK and Denmark to 3% and 4.5% in Greece and Italy. Business cycle effects tend to diverge across the two types of transitions, with employment inflows from unemployment following much more closely the evolution of GDP than those from inactivity, suggesting a larger impact of structural (policy) factors on the latter.

Trends in transition rates have a large impact on labour market performance. Evidence shows that transition rates to employment, from both unemployment and inactivity, are negatively correlated with structural unemployment, and positively correlated with participation and employment rates. Hence, the sustained rise in the trend components of transitions toward employment which occurred since the second half of the 1990s in the EU (chart 3), suggests that a structural improvement has taken place in the EU labour markets between the mid-1990s and 2007. Nonetheless, aggregate trends hide divergent developments across Member States. In the UK, the share of the unemployed finding a job within a year nearly doubled from 1983 to 2007, while a significant decline has occurred in Greece. Trend IE transition rates have increased substantially in Germany (since the late 1980s), and in Spain (since the mid-1990s), while decreasing in Greece, France, Denmark and Italy.

Chart 3: trends of transition rates, EU8 (%)



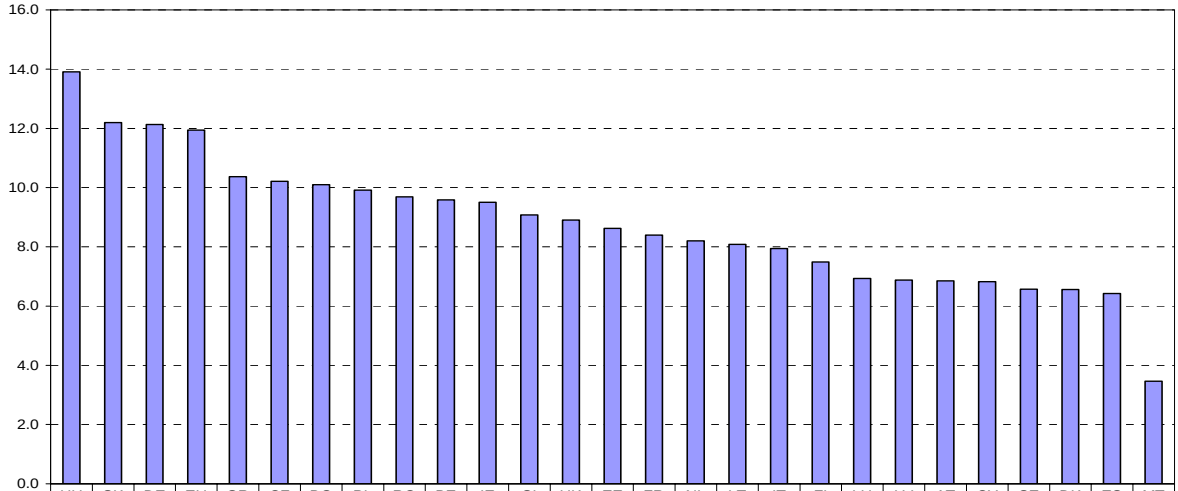
Source: DG EMPL calculations using EU LFS.

In relation to worker characteristics, the UE transition rates for older workers (aged 55-64) are less than a third of those of prime-age workers (aged 24-54), highlighting a severe disadvantage of the former category in terms of re-employment chances. Moreover, more educated unemployed and, to a larger extent, inactive people have a substantially higher probability of moving back into employment.

3. Unemployment Duration and the Risk of Long Term Unemployment

Evidence on flows should be seen in conjunction with the one on unemployment duration in order to evaluate the adjustment capacities of European labour markets. In Europe, close to 45% of all unemployment spells last longer than 1 year, compared with only about 10% in the USA, raising concerns on both equity and efficiency grounds. Based on LFS data, the average unemployment duration in the EU over the period 2005-2008 (chart 4) amounts to about 12 months[14]. However, this figure hides substantial variation by main workers' characteristics. Older workers have relatively higher unemployment duration (14.7 months against 12.2 for prime-age and 10.3 for young workers) as well as low-skilled workers (12.3 months, compared with 8.1 months for the skilled unemployed). On the other hand, the gender gap is on average very small (12 months for women against 11.7 for men)

Chart 4: Average duration of unemployment, 2005Q1-2008Q3 (complete spells, months)



	HU	SK	DE	EU	GR	CZ	BG	PL	RO	BE	IE	SI	UK	EE	FR	NL	LT	IT	FI	LU	LV	AT	CY	SE	DK	ES	MT
CDU	13.9	12.2	12.1	11.9	10.4	10.2	10.1	9.9	9.7	9.6	9.5	9.1	8.9	8.6	8.4	8.2	8.1	7.9	7.5	6.9	6.9	6.8	6.8	6.6	6.6	6.4	3.5

Source: DG EMPL calculations based on EU LFS data.

The literature suggests that the probability of leaving unemployment decreases with its duration (what is called 'negative duration dependence')[15], reflecting a gradual decline in employability the longer a person remains unemployed. Thus a rise in unemployment duration, following an economic downturn/recession, may turn a cyclical increase of unemployment rate into a structural one (i.e. unemployment hysteresis). In this context, adequate policy responses may involve, *inter alia*, better targeting of Active Labour Market Policies (ALMP) spending towards those most at risk of staying unemployed for long periods, or of becoming inactive, possibly using profiling techniques.

[14] This figure refers to the average duration of complete unemployment spells at the time of observation, which differs from the usual statistic which is based on incomplete spells (or spells currently in progress). The former measure enables to better capture short unemployment spells, although the latter presents a number of practical advantages (such as timeliness, transparency and ease of calculation). See the upcoming *Employment in Europe 2009* report for further details.

[15] This is assessed by controlling for individual characteristics which may have an impact on employability.

The impact of policies on the incidence of long-term unemployment (LTU) also needs to be investigated and monitored. A number of studies suggest that specific features of labour market institutions, such as strict employment protection legislation as well as generous and long-lasting unemployment benefits tend to be associated with longer periods of unemployment. A simple econometric cross-country analysis carried out on the above data suggests, however, that strict EPL tends to raise LTU, while spending on labour market policies tends to reduce it.[16] This evidence is broadly in line with the 'flexicurity' approach to labour market policies, which calls for supporting workers in undertaking 'good' transitions in the labour market, rather than preserving particular jobs.

4. GREEN JOBS

by Pierre Dechamps

The latest assessment report by the Intergovernmental Panel on Climate Change (IPCC) and the widely-noted Stern Review on the Economics of Climate Change have given a real sense of urgency to the fight against global warming—a very dangerous development in its own right and a phenomenon that further aggravates other existing environmental challenges. A global transition to a low-carbon and sustainable economy can create large numbers of green jobs across many sectors of the economy, and indeed can become an engine of development. Current green job creation is taking place in both the rich countries and in some of the major developing economies.

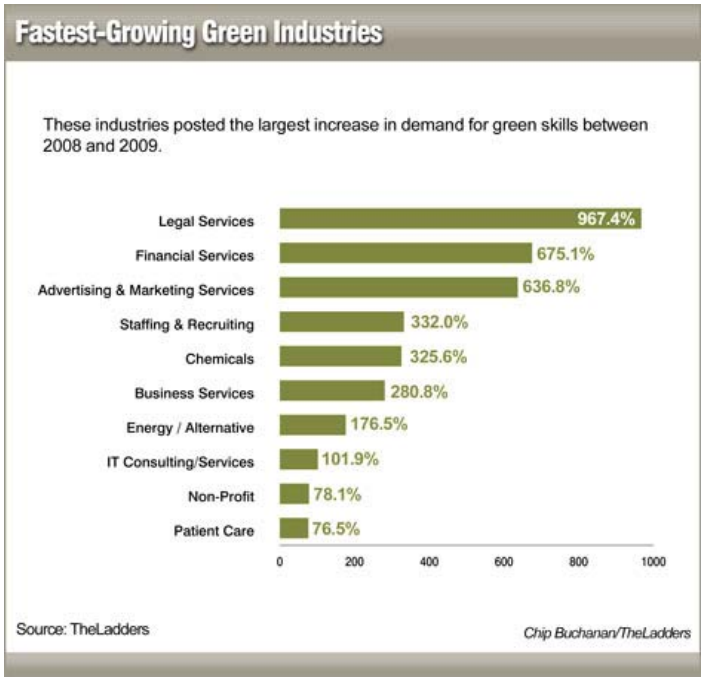
1. Defining and counting green jobs

Green jobs can de defined as work in agricultural, manufacturing, research and development (R&D), administrative, and service activities that contribute substantially to preserving or restoring the environment. Specifically, but not exclusively, this includes jobs that help to protect the ecosystems and biodiversity; reduce energy, materials, and water consumption through high efficiency strategies; de-carbonize the economy; and minimize or avoid all forms of waste and pollution.

Green jobs span a wide array of skills, educational backgrounds, and occupational profiles. This is especially true with regard to the so-called indirect jobs—those in supplier industries. Even for new industries like wind and solar power, supply chains consist largely of very traditional industries. For instance, large amounts of steel are incorporated into a wind turbine tower, and a substantial fraction of the value chain of solar photovoltaic is in the traditional mining industries. The reverse is true, in the sense that traditional industries like financial and legal services need to incorporate the environmental dimension in their business in order to survive. (Figure 9) shows that those sectors have had the largest increase in green job recruiting.

[16] The analysis is available in the upcoming *Employment in Europe 2009* report. Financial incentives linked to tax-benefit systems do not seem to have any significant effect on LTU.

Figure 9 : **Green jobs in traditional industries – TheLadders, website statistics**



Technological and systemic choices offer varying degrees of environmental benefit and different types of green employment. Emission mitigation has different implications than adaptation, as have efficient buildings vis-à-vis retrofits, or public transit versus fuel-efficient automobiles. These choices suggest that there is greener than green and less green than green in employment: some choices are more far-reaching and transformational than others.

This clearly means that green jobs will come as a result of a well conceived environmental policy and a well conceived industrial policy. Some of the EU Member States have clearly taken the lead in this. The example of the policies in place for wind and solar energy in Germany is a clear one. (Figure10). Most wind turbines and solar panels come either from Germany or from China which has also set up clear industrial policies and export policies in those sectors.

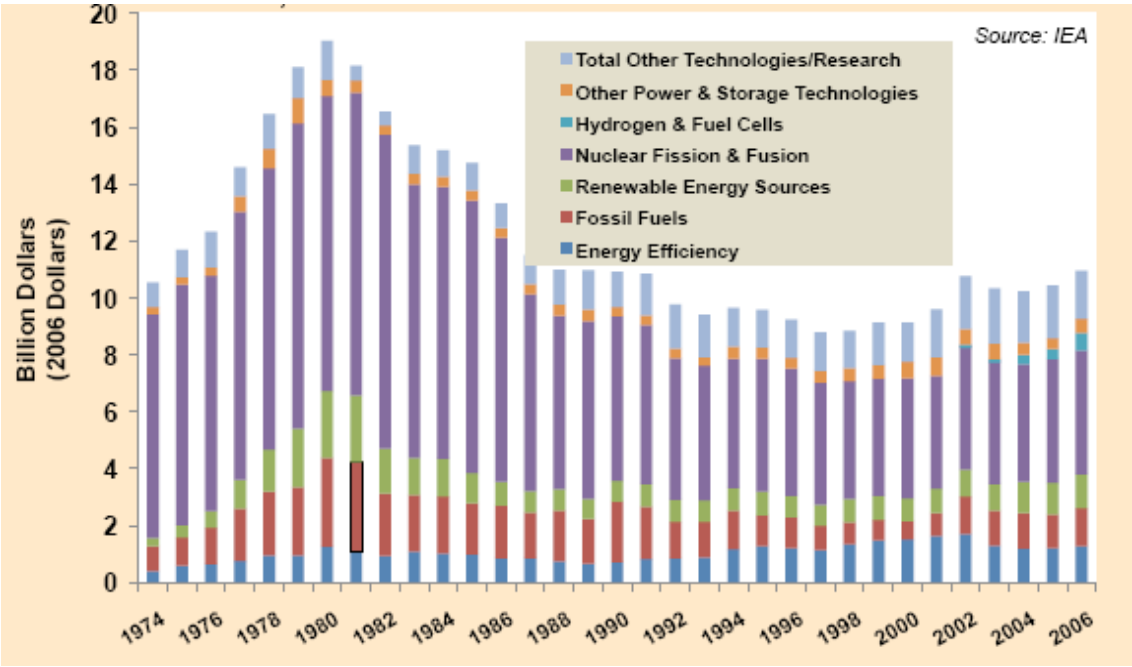
Figure 10 : **Employment in Germany in the renewable energy sectors.**

	1998	2004	2006
Wind power	16,600	63,900	82,100
Solar energy	5,400	25,100	40,200†
Hydropower	8,600	9,500	9,400
Geothermal energy	1,600	1,800	4,200
Biomass	25,400	56,800	95,400
Services	10,000	n.a.	n.a.
Subtotal	**66,600**	**157,100**	**231,300††**
Research, public information, export and other marketing promotion, administration	n.a.	3,400	4,300
Expansion of production capacities for renewable energy equipment	n.a.	5,800	23,500
Total	**66,600**	**166,300**	**259,100**

Source: Green Jobs: Towards decent work in a sustainable, low-carbon world", UNEP report, September 2008

Research and development is also required. Green sectors can only exist if they innovate. Sadly, public budgets for energy R&D have been going down over the last 25 years in most developed economies (Figure 11). This trend should be reversed.

Figure 11 : **IEA Member countries energy R&D – public budgets.**



2. Winners and losers

A successful strategy to green the economy involves environmental and social full-cost pricing, through the internalisation of energy and materials inputs, in order to discourage unsustainable patterns of production and consumption. In general, such a strategy is diametrically opposite to one where companies compete on price, not quality; externalize social and environmental costs; and seek out the cheapest inputs of materials and labour. A green economy is an economy that values nature and people and creates decent, well-paying jobs [17] .

As the move toward a low-carbon and more sustainable economy gathers momentum, growing numbers of green jobs will be created. Renewable energy sectors require as much as ten times more employment per MW generated than a coal or gas fired power plant. Although winners are likely to far outnumber losers, some workers and even whole sectors may be hurt in the economic restructuring toward sustainability. Companies and regions that become leaders in green innovation, design, and technology development are more likely to retain and create new green jobs. But workers and communities dependent on mining, fossil fuels, and traditional manufacturing industries will have difficulties to diversify their economies.

3. Green jobs, but where?

Much of the future and pace of development of green jobs depend on the outcome of the international climate change negotiations. Those negotiations are structured in four main chapters: mitigation, adaptation, technology and finance. Any agreement will probably comprise some sort of net financial transfer from developed economies to developing and merging economies to help them adapt to climate change, an acquire the necessary mitigation and adaptation technologies to do so. In this respect, the arrangements envisaged for intellectual property rights will determine where some of the green jobs will be. Free access to intellectual property and know how, like it is asked by some of the emerging economies, would allow them to flood the world with the new green products, and get all the associated green jobs, at the expense of Europe and the other developed economies.

4. Conclusions

Green jobs can be the solution to fight both the environmental and the economic crisis in which we are now, but will not be coming naturally or automatically. Their emergence requires that the right policies are put in place for the environment, for the economy and the internalisation of environmental costs, together with a clear industrial policy, the right property rights regime, in the context of a well conceived international climate agreement. The world has no choice but go towards more green jobs. Europe has a chance to play; if the right policies are in place, moving first in this direction will bring very substantial benefits.

[17] "Green Jobs: Towards decent work in a sustainable, low-carbon world", UNEP report, September 2008

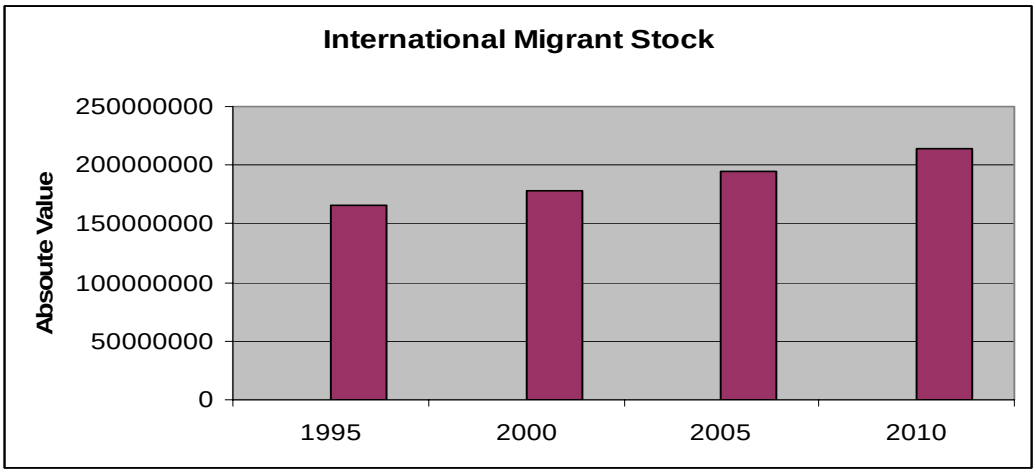
5. MIGRATION AND EMPLOYMENT IN TIMES OF ECONOMIC DOWNTURN

by Stefano Bertozzi

1. Setting the scene

The global financial and economic crisis, which broke out in the third quarter of 2008, has already had an adverse impact on the socio-economic fabric of EU Member States and their citizens. Given the different economic structures of EU Member States, the current economic downturn has had an uneven impact across EU economies, in particular on their GDP and employment growth responses. The International Labour Organisation estimates that as many as fifty million jobs worldwide could disappear by the end of 2009.[18]
International migrants, one of the most visible features of a more interdependent world, are set to number 213 943 812 by 2010. On the basis of the latest data compiled by the Population Division of the United Nations, the table below shows the increase of 47 975 034 international migrants registered over the period 1995-2010. This moved international migrants up from 2.9% of the total world population in 1995 to 3.1% in 2010.

Figure 12



Source: United Nations Population Division

2. Migration and employment

International migrants help EU Member States to alleviate the problem of their ageing population, partially offset skill shortages, improve labour market flexibility, keep wages under control and contribute to GDP growth. For migrants, however, job flexibility means that they are more vulnerable than national workers to unexpected changes in business cycles. For example, construction, manufacturing, tourism and restaurants, all of which employ a large proportion of migrants, have been hit hard by the current economic slump. In Denmark, employment in manufacturing has fallen by 32.8% between July 2008 and July 2009. In Spain, the construction industry has laid off 24.5% of the workforce.[19] Employment reports reveal that migrants were the first to lose their jobs.

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[18] "*The global economic crisis and migrant workers: impact and response*", International Labour Organisation, July 2009, Geneva

[19] "*The global economic crisis and migrant workers: impact and response*", International Labour Organisation, July 2009, Geneva, and "*Migration and the global recession*", Migration Policy Institute, September 2009.

Moreover, in times of economic crisis, migrants and the associations that defend their rights in host societies are also exposed to anti-immigrant sentiments, which tend to gain strength among EU citizens. For example, in January 2009, xenophobic protests took place in the United Kingdom where Scottish workers demonstrated against employing foreign labour. Similar demonstrations were staged in Spain by Spanish employees who objected to shipyards hiring Portuguese and Romanian workers.

Contraction of the world economy, coupled with a surge in xenophobic attitudes, has prompted some EU countries[20] to adopt more stringent labour migration policies and to introduce voluntary return programmes. This political stance has only party yielded the desired results, as many EU Member States have reported an increase in irregular employment and in irregular migration flows, as migrants are reluctant to return and stay in their countries of origin, where job opportunities and living conditions are worse than in Europe. For example, in Spain, despite the generous package offered to migrants, few decided to take it up and go back to their countries of origin. In February 2009, the Czech Republic also launched a voluntary return programme. It was mainly intended for non-EU workers, in particular Vietnamese. This programme too fell short of the government's expectations.
Another point to stress is that several countries of origin depend heavily on remittance flows. Migrants therefore set off for Europe in a bid to find a job and send money home. This explains why remittances tend to be resilient even in sharp economic downturns. Employers, squeezed between tighter credit and lower revenues, also prefer to hire irregular migrants, as they are less expensive and easy to dismiss in the event of any deterioration in economic circumstances.

The occupational distribution of migrant workers is also worth examining in order to understand employment opportunities for migrants better. While it is true that employment in construction, manufacturing, tourism and restaurants has been significantly reduced as a result of the crisis, on the other hand employment opportunities in health care, education, domestic aid and, in part, agriculture have been growing, as EU citizens, in particular those entitled to long-term unemployment benefits, spurn low-skilled and low-paid jobs. As for highly skilled jobs, in particular in healthcare and education, national labour supply cannot keep up with the increasing demand and this creates job opportunities for highly qualified migrant workers. For example, in the health and social work sector, in Denmark 19.5% of the jobs go to migrant workers, in the Netherlands 15.2% and in Sweden 19.3%. According to the data compiled by the International Labour Organisation in July 2009, few migrants have lost their jobs in these sectors since the start of the crisis.

3. Policy Responses

In response to the crisis, countries of origin have hatched **three policy measures**. **The first** was designed to **help returnees fit back into the labour market in their home countries**. **The second** was geared towards **protecting the rights of migrant workers in host societies**, in particular against discrimination and xenophobia. **The third** was directed at **identifying the least affected labour markets in the world**. For example, Bangladesh and Sri Lanka strove to find alternative labour opportunities for their citizens in an effort to avert repatriation of workers. The Philippines provided returning migrants with economic assistance packages and retraining programmes. It also increased spending on rural infrastructure. Ecuador started a "*Welcome Home*" programme for to returning migrants, which included aid packages. It also put together, with the assistance of a university in Madrid, a training programme focusing on agriculture, a sector in which there is an acute shortage of home-grown labour.

[20] Austria, France, Italy and Spain.

In the aftermath of the global crisis, some policy-makers predicted a massive return of migrant workers to their countries of origin. This has not come true, apart from localised returns. Instead, the impact of the crisis on migrant workers in Europe has varied. In the countries hardest hit by the crisis, the consequences for migrants have been more acute in terms of loss of employment. In sectors such as manufacturing, construction, restaurants and tourism, many migrants have become victims of the contraction of employment. This loss of employment, however, has not triggered any substantial return of migrants, as some migrant workers qualify for unemployment benefits, accept low-paid and risky jobs in the informal economy or simply prefer to wait for the storm to pass before looking for a new job. Moreover, other branches of the economy, including education and healthcare, have maintained, or even expanded, their levels of employment. Demand for labour remains sustained, as national workers are unwilling to take on the jobs performed by migrant workers. This partly explains why migrant workers who have lost their jobs have not opted for voluntary return programmes specifically designed and funded by countries of destination.

International migrants have helped EU Member States to spur economic growth and prosperity. They have also helped their countries of origin to reduce poverty and promote development with the aid of remittances and knowledge transfers. Europe needs to look beyond the crisis by continuing to implement its Global Approach to migration and putting forward an **Immigration Code**, as the Commission's hand in the area of migration management will be strengthened with the entry into force of the Lisbon Treaty. This new Code should streamline admission and residence procedures, clarify the rights and duties of migrants, tighten up border controls, map out common police measures designed to fight irregular migration and human trafficking, make the EU more attractive for highly skilled workers and recognise more clearly the important role migrant workers play, both in their countries of origin and in countries of destination.

6. LES ATTITUDES ENVERS LE CHÔMAGE EN EUROPE

par Anna Melich

Depuis le début de la crise économique, le chômage est une situation qui prend une place de plus en plus importante dans la vie des Européens. Selon le dernier Eurobaromètre du printemps 2009, beaucoup d'entre eux connaissent cette situation dans leur entourage (36% pour la famille et les amis; 24% pour les collègues) alors que beaucoup moins déclarent avoir perdu leur travail personnellement (9%). Cette différence peut s'expliquer par le fait que certaines couches sociales très défavorisées, ainsi que les immigrés, ne font pas partie de l'échantillon de l'Eurobaromètre. Dans un cas comme dans l'autre, les Lithuaniens semblent battre le record des expériences négatives à l'égard de l'emploi (Graphique 12).

Graphique 12

QB1. Please tell me whether or not each of the following situations has happened to you, as a result of the economic crisis? - Answer 'yes'

	Someone from your family, a relative, or a close friend lost their job	One of your colleagues has lost their job	You lost your job
EU27	36%	24%	9%
BE	**21%**	14%	*7%*
BG	**31%**	29%	*10%*
CZ	**38%**	35%	*11%*
DK	**36%**	26%	*7%*
DE	**30%**	20%	*7%*
EE	**52%**	42%	*15%*
IE	**49%**	37%	*16%*
EL	**28%**	12%	*4%*
ES	**55%**	36%	*17%*
FR	**33%**	19%	*7%*
IT	**33%**	18%	*6%*
CY	**30%**	13%	*7%*
LV	**61%**	57%	*21%*
LT	**54%**	43%	*18%*
LU	**23%**	17%	*4%*
HU	**48%**	38%	*15%*
MT	**26%**	15%	*5%*
NL	**24%**	16%	*5%*
AT	**32%**	27%	*7%*
PL	**31%**	17%	*9%*
PT	**39%**	32%	*16%*
RO	**28%**	26%	*9%*
SI	29%	**37%**	*7%*
SK	37%	**38%**	*9%*
FI	**32%**	23%	*9%*
SE	**37%**	24%	*7%*
UK	**44%**	28%	*9%*
HR	32%	31%	10%
TR	44%	24%	12%
MK	35%	22%	10%

highest percentage per item
highest percentage per country
lowest percentage

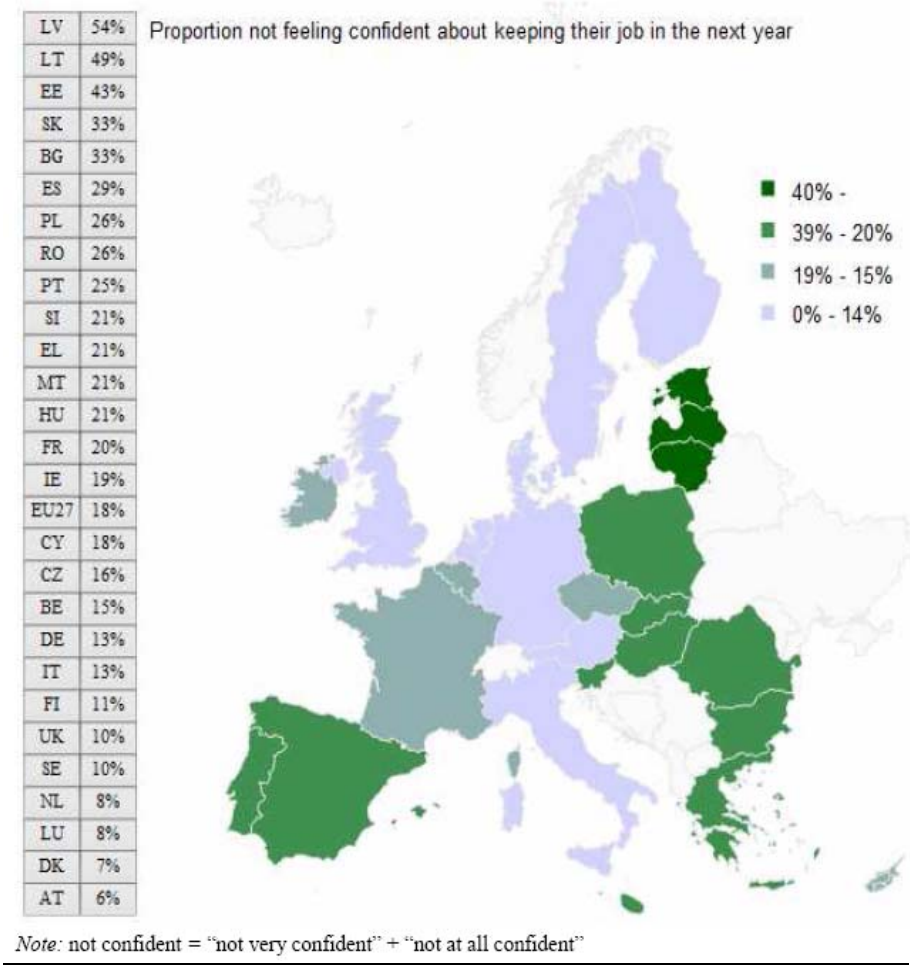
Source : EB 71 "Employment and Social Policy", fieldwork May-June 2009, publication July 2009

Dans un autre Eurobaromètre plus récent (Juillet 2009), mais dont les interviews ont eu lieu par téléphone, on retrouve les trois Républiques baltes parmi les plus pessimistes quant à "la conservation de son emploi dans les 12 prochains mois" suivis de la Slovaquie, la Bulgarie et l'Espagne. Les plus optimistes étant les Néerlandais, les Luxembourgeois, les Danois et les Autrichiens (Carte 1).

Du point de vue démographique, l'optimisme tend à augmenter avec l'âge. A l'inverse, les 25-39 ans sont les plus pessimistes quant à leur future situation d'emploi. Il y aussi une relation directe entre l'opinion sur les chances de conserver son emploi et le niveau d'éducation. Les personnes avec un niveau d'éducation plus élevé ont plus de confiance dans l'avenir de leur emploi et inversement. Selon le type d'occupation, les travailleurs manuels sont les plus pessimistes.

Carte 1

LV	54%
LT	49%
EE	43%
SK	33%
BG	33%
ES	29%
PL	26%
RO	26%
PT	25%
SI	21%
EL	21%
MT	21%
HU	21%
FR	20%
IE	19%
EU27	18%
CY	18%
CZ	16%
BE	15%
DE	13%
IT	13%
FI	11%
UK	10%
SE	10%
NL	8%
LU	8%
DK	7%
AT	6%



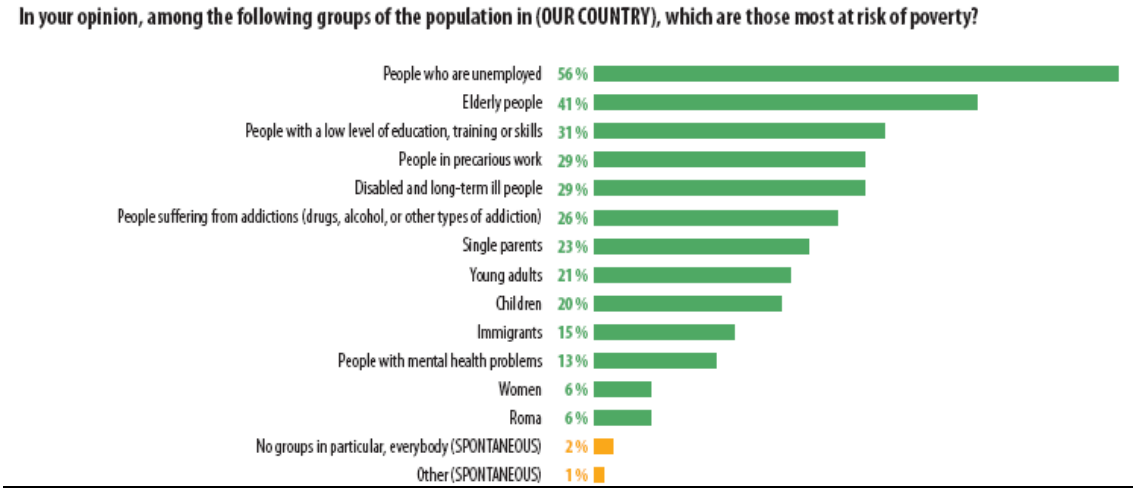
Source : EB Flash 276 ,"Monitoring the social impact of the crisis : public perceptions in the European Union" , Fieldwork : July 2009, Publication October 2009

Pour 52% des Européens, le chômage est la source principale de la pauvreté dans leur pays (Graphique 13) et pour 56%, les chômeurs sont la population de leur pays qui a les plus fortes chances de devenir pauvre (Graphique 14).

Chômage et pauvreté sont donc très étroitement liés en l'Europe.

Graphique 13

Graphique 14



Source Graphs 2 and 3:"Eurobarometer survey on poverty and social exclusion", Fieldwork : August-September 2009, publication October 2009.