CHAPTER 11

Performances of Labour Markets during Recession in Different Labour Market Regimes

Maja Jandrić[1], Slavica Stevanović[2]

Abstract: *Objective of this paper was to analyse differences in labour market performance in various labour market regimes during and after the latest recession. Different labour market regimes had specific paths of adjustments to recessional macroeconomic shocks, which can be related to underlying labour market institutions, as well as other institutional characteristics. Reaction of European labour markets on economic crisis 2008-2009 varied across the Member States. Classification of countries was primarily based on principal component analysis performed in order to capture two main labour market features: flexibility and security. These features are a basis of the "flexicurity" concept and they are mainly determined by labour market institutions. Key determinants of flexibility and security balance in the labour market are: employment protection legislation, unemployment benefits system and active labour market policies. Within the labour market regimes results have been rather uneven, but we might say that Nordic and Continental regime tend to have had better labour market performances compared to Anglo-Saxon and Mediterranean. However, one must be careful with definite conclusions, since a lot of other factors, beside labour market institutions, influenced labour market performances.*

Key words*: Flexicurity, Labour Market Institutions, Recession*

Classifications of Labour Market Regimes

According to Esping-Andersen classification there are three main regimes of the welfare state: liberal (United Kingdom, United States, Canada, Australia), social-democratic (Scandinavian countries) and conservative (or conserva-

[1] Maja Jandrić, MSc, Faculty of Economics, Belgrade.
[2] Slavica Stevanović, MSc, Institute of Economic Sciences, Belgrade.

tive-corporatist: Austria, France, Germany, Italy). Similar categorization can be made according to labour market characteristics (Zirra, 2007):

Table 1: Characteristics of different labour market regimes

Model	Scandinavian (modernized social-democratic)	Anglo-Saxon (liberal)	Continental (conservative)	Mediterranean (particularistic)
Social security provisions	High	Low	High	Low
Unemployment protection	High	Low	High	Low
Labour market flexibility	Flexible	Flexible	Rigid	Rigid
Precariousness of employment	Low	High	Low	High
Other characteristics	Preventive, active and activating labour market policies, public employment, life-long learning	Smaller role of labour market policies, training on the job	Passive and some active labour market policies, vocational training	Stronger passive labour market policies, public employment, training in the industry
Outcomes				
Risk of poverty	Low	High	Low	High
Employment rate	High	High	Low	Low
Social segmentation of the labour market	Low	Low	High	High

Categorization of a country depends mainly on its institutional settings. According to Howell (2010) institutional arrangements are mostly unique in every country and they encompass large number of different institutional solutions concerning:

- Labour relations system (coordination and centralization),
- Degree of discretion in macroeconomic policy,
- Size of public employment,
- Character of firms` strategies: coordinated/market-based,
- Generosity and design of welfare state,
- Regulation of labour, product and financial markets[3].

[3] Howell, 2010, p. 4.

Labour market performances are, among other factors, influenced by complex institutional system. If various parts of institutional setting are designed to be complementary, they form specific models – varieties of capitalism (Hall and Soskice, 2001; Hall, 2007). Howell argues that Keynes and Kalecki formed a basis for including institutions into the research of comparative employment performance, as they stated that achieving full employment was also a political and institutional matter[4]. Varieties of capitalism approach were developed by Hall and Soskice (2001) in order to establish a better analytical framework for comparative studies of economic systems. There are two main ideal types of political economies:

- liberal market economies: coordination of firms` activities primarily via hierarchies and competitive market arrangements (United States, United Kingdom, Australia, Canada, New Zealand, Ireland);
- coordinated market economies : coordination of firms` activities primarily via non-market relationships (Germany, Japan, Switzerland, the Netherlands, Belgium, Sweden, Norway, Denmark, Finland, Austria)[5].

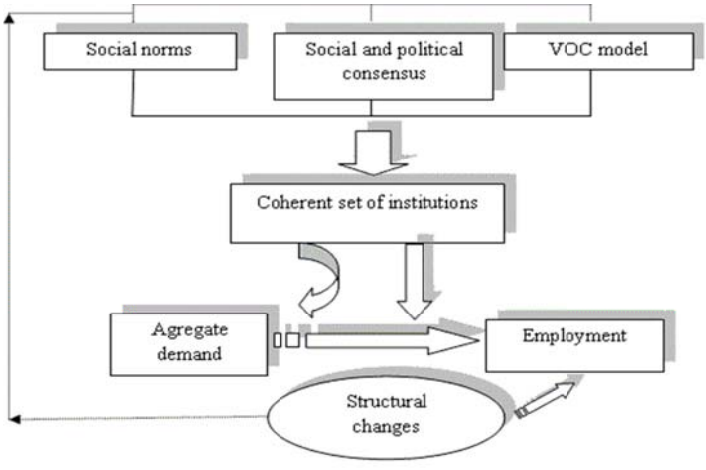
According to this approach, France, Italy, Spain, Portugal, Greece and Turkey could form a separate cluster (Mediterranean) which is characterized by non-market coordination in the sphere of corporate finance and more liberal arrangements in the sphere of labour relations[6].

Howell (2010) also argues that it is necessary to emphasize the importance of institutional and policy complementarities when performing comparative employment performance analysis. If institutional system is coherent and has a basis in high social and political consensus, it can result in very low unemployment accompanied with rather generous welfare state (Austria, Norway, West Germany before 1990, Netherlands and Denmark)[7]. Besides, it is argued that there is a significant link between effectiveness of economic policy and institutional setting. Also, coherence of institutions can influence economic efficiency and level of GDP, as well as response of (un)employment to changes in GDP (Hall and Gingerich, 2004; Howell, 2010). When macroeconomic policy is concerned (mainly aggregate demand management), there are differences between various macroeconomic regimes. These differences

[4] Ibid, p. 5.
[5] Hall and Soskice (2001), p. 8.
[6] Ibid, p. 21.
[7] Howell (2010), p. 27.

include the choice of predominant goal (unemployment or inflation), as well as the level of discretion and interventionism in economic policy. Joint influence of institutional and policy factors on employment performance is presented in Figure 1.

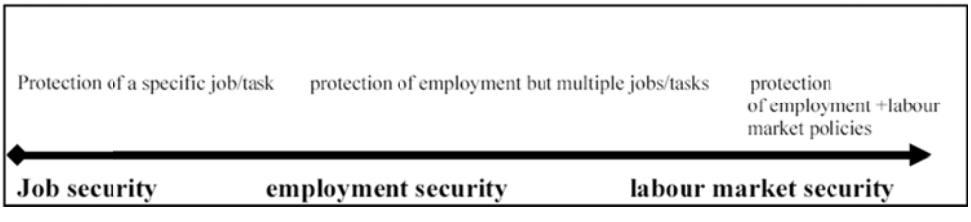
Figure 1: Joint influence of institutional and policy factors on employment



Labour Market Regimes and the Flexicurity concept

Beside these more comprehensive approaches, we can classify the countries according to degree of flexibility and security in their labour markets (Muffels et al, 2002; Wilthagen, 2004 and Auer, 2005). This approach is also used in European Commission reports (2006) and its main idea stems from flexicurity concept. Flexicurity is a broad and a relatively new concept and various definitions can be found in the literature. The main goal of this approach is to achieve enough labour market flexibility without significant reduction of workers` security. Besides, emphasis is moved from job security to employment/labour market security (Figure 2).

Figure 2: Shift from job to labour market security



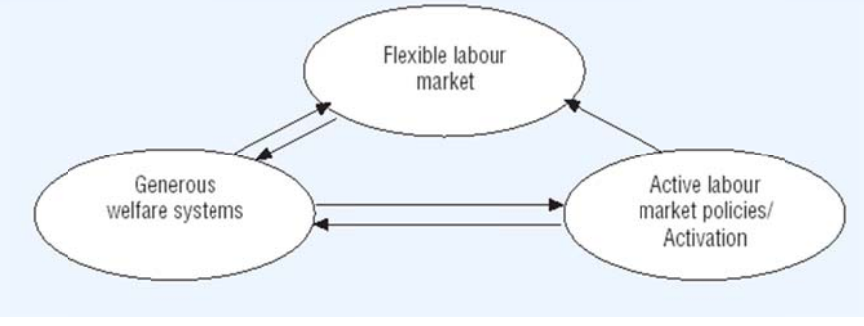
Source: Auer (2006), p.4.

Barbier (2007) gives two alternative definitions of flexicurity, which are not exclusive from one another:

- Flexicurity as a policy/strategy whose aim is to reconcile flexibility on the one hand, and security on the other;
- Flexicurity as a system of elements inserted within society that is instrumental in provoking this reconciling[8].

Among labour market institutions and policies, employment protection legislation (EPL), active labour market policies (ALMP) and unemployment benefit system (UB) play the key role in achieving optimal combination of flexibility and security. Figure 3 describes the Danish flexicurity model in the form of the „golden triangle", which is characterized by low restrictiveness of employment protection legislation (flexibility) on the one side, and, on the other, generous system of unemployment benefits and high level of spending on active labour market programmes (security).

Figure 3: „The Golden triangle of flexicurity"



Source: OECD (2004), p. 97.

Due to flexible labour market, workers can rather easily become unemployed. In case of unemployment, they are covered by generous unemployment benefit system, and unemployment spells are rather short. If they are not quickly re-employed, they are assisted by ALMP.

Various elements and possible combinations of flexibility and security are presented in famous Wilthagen matrix of flexicurity (Table 2).

[8] Barbier (2007), p. 168.

Table 2: Wilthagen matrix of flexicurity

F \ S	Job security	Employment security	Income security	Combination security
External numerical flexibility	• Types of employment contracts • Employment protection legislation • Early retirement	• Employment services/ALMP • Training/lifelong learning	• Unemployment compensation • Other social benefits • Minimum wages	• Protection against dismissal during various leave schemes
Internal numerical flexibility	• Shortened work weeks/part-time arrangements	• Employment protection legislation • Training/lifelong learning	• Part-time supplementary benefit • Study grants • Sickness benefit	• Different kind of leave schemes • Part-time pension
Functional flexibility	• Job enrichment • Training • Labour leasing • Subcontracting • Outsourcing	• Training/lifelong learning • Job rotation • Teamwork • Multi-skilling	• Performance related pay systems	• Voluntary working time arrangements
Labour cost/wage flexibility	• Local adjustments in labour costs • Scaling/reductions in social security payments	• Changes in social security payment • Employment subsidies • In-work benefits	• Collective wage agreements • Adjusted benefit for shortened work week	• Voluntary working time arrangements

Source: Vermeylen (2007), p. 4.

According to European Commission, main components of flexicurity are:

- Flexible and reliable contractual arrangements;
- Lifelong learning (LLL);
- Active labour market policies (ALMP);

OECD study (2004) showed that generous unemployment benefits and higher expenditure on ALMP raise workers' perceptions of employment security.[9]

[9] OECD (2004), p. 95.

In order to classify EU Member States into groups based on flexicurity systems/models, in European Commission (2006) the following methodology was used:

1. For eighteen countries Principal Component Analysis (PCA) was performed, using four active variables:
    a. the strictness of EPL[10] (to capture numerical flexibility),
    b. percentage of participants in LLL programmes (LLL),
    c. sum of expenditures on ALMP and passive labour market policies (unemployment benefits) as percentage of GDP (LMP),
    d. average tax wedge (TWED) which is used as a proxy for distortions created by a tax system.

These four variables are used to identify main dimensions that characterize flexicurity systems.

2. PCA results were used as a basis for clustering countries.

Three principal components were identified and interpreted as:

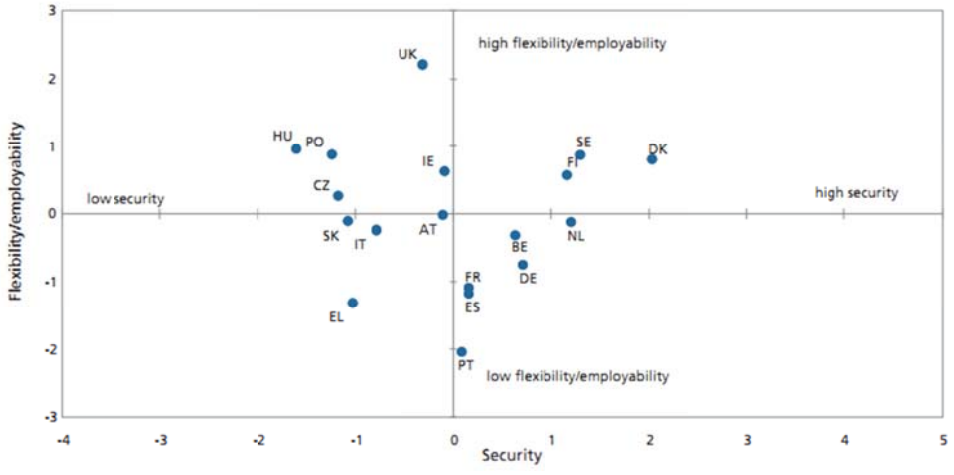
a. income/employment security,
b. numerical external flexibility,
c. tax distortions.

Interpretation of principal components was based on correlation coefficients with initial four variables. "Security" component has positive correlation with LMP and LLL. "Flexibility" component has negative correlation with EPL and positive correlation with LLL, and third component is highly positively correlated with TWED.

Since the emphasis here is on flexibility and security dimensions, we focus on these two principal components. Figure 4 plots the country scores along principal components. The security and flexibility/employability axes each account for about one third of the overall variability of the data.

[10] OECD developed a summary indicator of EPL. For each country, employment protection is described along 21 basic items which can be classified in three main areas: (i) protection of regular workers against individual dismissal; (ii) regulation of temporary forms of employment; and (iii) specific requirements for collective dismissals. Starting from these information, a multi-step procedure has been developed for constructing summary indicators of EPL strictness that allow meaningful comparisons to be made, both across countries and between different years. Raw data on each item is converted into a cardinal score on a scale of 0-6, with higher scores representing stricter regulation.

Figure 4: Country scores along security and flexibility/employability



Source: European Commission (2006), p. 105.

Five clusters that were identified are shown in table 3.

Table 3: Groups of countries classified by flexibility/security dimensions

	Flexibility*	Security**	Countries
Nordic	intermediate-to-high	high	Denmark, the Netherlands, Sweden and Finland
Continental	intermediate-to-low	intermediate-to-high	Germany, Belgium, Austria and France
Mediterranean	low	relatively low	Spain, Portugal and Greece
Anglo-Saxon	high	relatively low	UK and Ireland
Eastern European (plus Italy)	intermediate-to-high	low	Italy, Poland, Hungary, Czech Republic and Slovakia

*based mainly on EPL
**based mainly on LMP expenditures

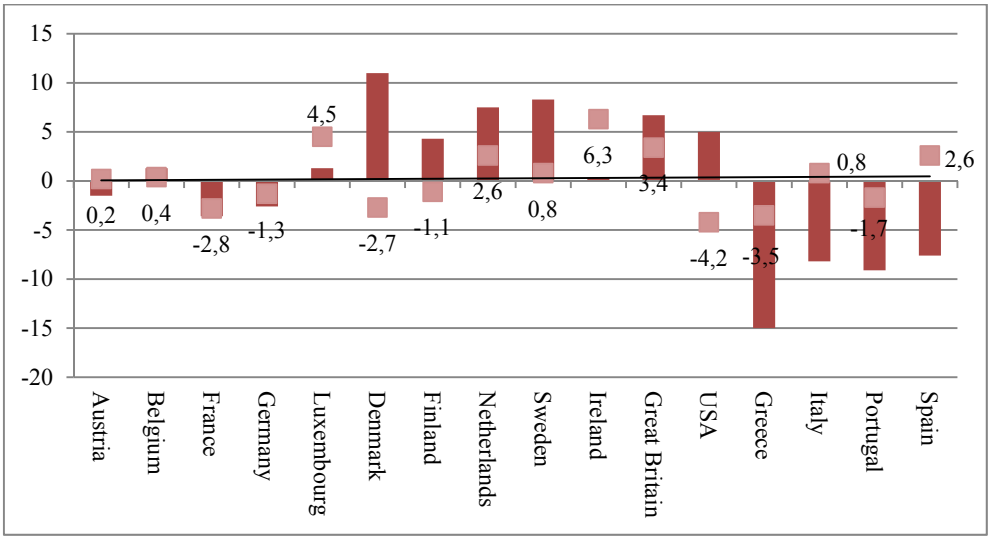
The results are similar to those obtained in the literature. Frederiksen et al. (2004) and Gaard (2005) report four groups of countries (new Member States are not included) which have similar characteristics as flexicurity regimes mentioned above. Muffels (2007) reports same five clusters as above.

Labour Market Performances during the Recession

Differences in labour market performances between labour market regimes were analysed and documented well before the recent economic crisis. Schmid (2007) has developed enhanced aggregate labour market performance indicator which comprise nine dimensions of performance that correspond to the Lisbon employment guidelines:

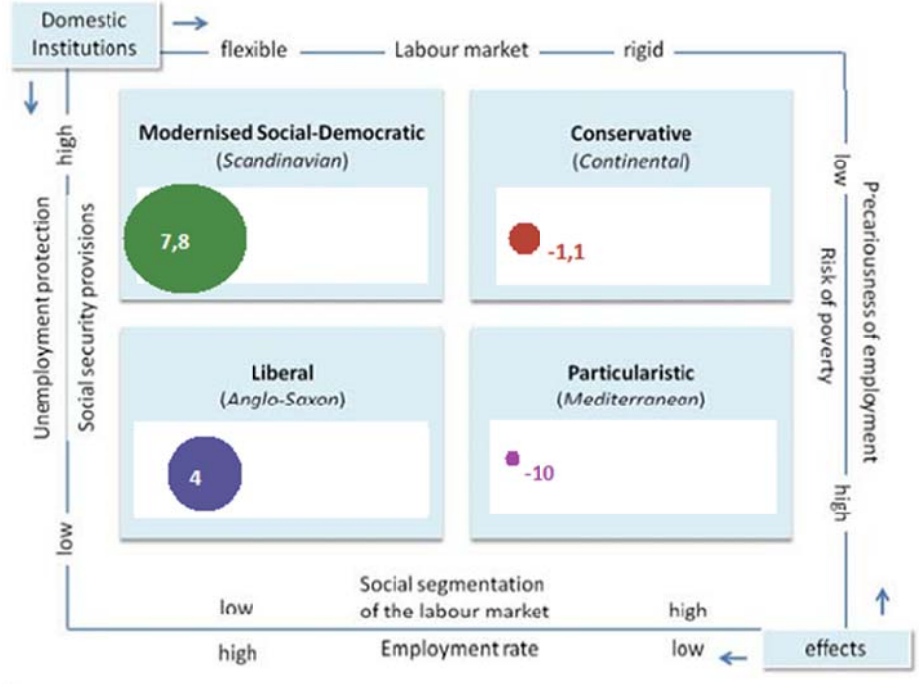
- overall inclusion (employment rate; share of long-term unemployed),
- social inclusion (female labour force employment rate; social capital),
- flexibility of supply (share of part-time work),
- flexibility of demand (share of temp-agency work),
- labour market efficiency (productivity per working hour),
- employability (share of tertiary educated people; participation in continuing education/training),
- segmentation (wage gap between men and women),
- social security (working poor) and
- subjective wellbeing (job satisfaction).

Figure 5: Aggregate labour market performance indicator



Darker columns on the chart show the value of the indicator, while lighter squares and numbers show the magnitude of change of the value in the period between 1997 and 2005 Denmark, Sweden and Netherlands have the largest value of this indicator. The largest fall of value was in the USA. Weighted averages for each labour market regime are presented in figure 6.

Figure 6: Schmid`s aggregate indicator for different labour market regimes



Best aggregate performances has Scandinavian, which is followed by Anglo-Saxon regime, and far behind are Continental and especially Mediterranean labour market regime, both with negative values of the aggregate indicator.

Not only that recession 20008-2009 was the deepest after the WWII, but it was also the most widespread. In some countries, the size of economic contraction that was recorded in this recession hasn`t been seen since the 1930s. In EU 27 quarter-on-quarter GDP growth turned negative in Q2 2008. Also, this quarter was a turning point concerning employment growth in EU. In the next quarter, Q3 2008, seasonally adjusted quarter-on-quarter level of employment began to fall. Seasonally-adjusted quarter-on-quarter change in employment was negative until Q2 2010, when for the first time in almost

two years employment remained unchanged compared to the previous quarter. In other words, the fall in employment stopped almost a year after quarter-on-quarter GDP growth turned positive.

Timing, length and depth of recession varied across the states. In table 4 is presented quarter to quarter change in GDP (first row for every country) and employment (second row for every country) in period Q12008-Q2010. Shaded fields represent quarters when fall in GDP (darker colour) and/or fall in employment (lighter shade) was recorded.

Table 4: GDP and employment growth rates in selected EU Member States (quarter-on-quarter growth rates, seasonally-adjusted)

	2008 Q1	2008 Q2	2008 Q3	2008 Q4	2009 Q1	2009 Q2	2009 Q3	2009 Q4	2010 Q1	2010 Q2
BE	0.8	0.4	-0.6	-2.0	-1.8	0.2	1.1	0.6	0.1	1.1
	0.5	0.4	0.4	0	-0.4	-0.3	-0.3	0	0.3	0.3
CZ	0.5	1.0	0.1	-1.6	-3.3	-1.1	0.4	0.9	0.7	1.0
	0.1	0	0.5	0.3	-0.7	-1	-0.4	0.2	-0.9	0.1
DK	-1.4	1.5	-1.8	-2.4	-2.2	-1.9	-0.1	0.3	0.3	1.1
	1.3	-0.1	0.5	-0.1	-1.4	-1.5	-1.4	-1.3	0.1	0.4
DE	1.1	-0.4	-0.4	-2.2	-4.0	0.3	0.8	0.7	0.5	1.9
	0.6	0.2	0.2	0.1	-0.1	-0.2	0	0	0	0.2
EE	-1.9	0.9	-1.0	-8.4	-4.9	-4.0	-1.3	1.4	-0.3	2.7
	0.5	-0.6	0	-0.3	-5.1	-4.9	-1.2	-1.4	-1.8	-1.3
IE	-2.4	-2.2	0.0	-3.5	-2.9	-0.8	-0.5	-1.0	1.3	-0.7
	-0.2	-0.9	-1.4	-1.6	-3.9	-1.7	-1.8	-1.1	-0.8	:
EL	0.1	0.5	0.3	-0.8	-1.1	-1.0	-0.6	0.7	-1.9	-1.3
	-0.3	-0.1	0.1	0.1	-0.6	-0.2	-0.5	-0.8	-0.3	-0.9
ES	0.5	0.0	-0.8	-1.1	-1.6	-1.0	-0.3	-0.1	0.2	0.3
	0.3	-0.5	-1.1	-1.8	-2.8	-1.5	-1.4	-0.7	-0.1	-0.2
FR	0.3	-0.7	-0.3	-1.4	-1.6	0.1	0.3	0.6	0.1	0.5
	0.2	0.1	-0.1	-0.3	-0.5	-0.4	-0.3	-0.1	0	0.1
IT	0.5	-0.6	-1.1	-1.8	-3.5	-0.2	0.4	-0.2	1.1	0.5
	-0.2	-0.1	-0.1	-0.1	-0.8	-0.4	-0.6	-0.2	0.3	-0.2
LV	-0.7	-0.1	-6.1	-1.8	-9.6	-1.2	-6.8	1.2	1.1	0.1
	-0.2	0.1	-1.3	-4	-3.6	-5	-4.6	-2	-1.8	1.3
LT	0.3	0.2	-1.0	-0.6	-13.5	-0.6	0.3	-0.8	0.5	0.6
	-0.3	-0.4	-0.1	-1.4	-3.4	-1.3	-1.6	-2.6	-2.1	-0.4
LU	0.8	0.3	-1.2	-4.2	-1.0	-2.1	2.2	-0.5	1.2	1.5
	1.3	1.1	1	0.5	-0.2	0	0.1	0.3	0.3	:
HU	1.4	-0.2	-1.0	-2.1	-3.3	-1.2	-0.9	0.2	1.1	0.4
	0.1	-0.7	0.5	-0.8	-1.1	-0.9	-1.1	0.3	-0.4	0.6
NL	0.5	-0.4	0.0	-1.1	-2.2	-1.2	0.8	0.5	0.5	0.5
	0.4	0.4	0.1	-0.1	-0.3	-0.9	-0.6	0.1	-0.3	:
AT	1.2	0.1	-1.2	-1.8	-1.7	-0.8	0.7	1.0	0.0	0.7
	0.5	0.6	0.2	0	-1.1	-0.2	0.1	0.2	0.2	0.2

	2008 Q1	2008 Q2	2008 Q3	2008 Q4	2009 Q1	2009 Q2	2009 Q3	2009 Q4	2010 Q1	2010 Q2
PL	1.4	0.7	0.8	-0.4	0.4	0.6	0.4	1.5	0.7	1.0
	2	0.1	0.4	0.5	0	-0.2	-0.1	-0.1	-0.3	1.1
PT	0.0	-0.2	-0.5	-1.1	-2.3	0.3	0.6	-0.1	0.9	0.3
	0.3	0.2	-0.6	-0.1	-1.3	-0.8	-0.9	0.1	-0.1	-0.6
SI	1.6	0.9	0.4	-3.8	-5.5	-0.6	0.3	-0.1	0.2	1.1
	0.8	0.7	0.3	0	-0.7	-0.9	-0.8	-0.8	-0.5	-0.3
SK	-2.4	1.2	1.3	1.1	-8.4	1.3	1.3	1.4	0.8	0.9
	0.2	1	1.4	-0.7	-2.3	0	-0.7	-0.3	-0.9	-0.3
FI	-0.5	0.1	-0.3	-2.5	-6.3	-1.1	1.5	-0.4	0.8	3.3
	0.4	0.7	-0.6	0.2	-1.2	-1.4	-1	-0.5	0.6	0.4
UK	0.0	-1.3	-2.0	-2.3	-1.6	-0.2	0.2	0.7	0.4	1.1
	0.4	0.1	-0.4	-0.2	-0.5	-0.9	-0.1	0	-0.2	0.7
EU 27	0.4	-0.4	-0.7	-1.8	-2.6	-0.3	0.4	0.5	0.5	0.9
	0.4	0.1	-0.1	-0.3	-0.8	-0.7	-0.5	-0.2	-0.2	0

Source: Eurostat, European Commission (2010), p. 22.

Time at which individual countries entered and exited recession varied significantly among EU Member States. Nevertheless, by Q1 2009 all the Member States except Poland and Slovakia entered the recession. During 2009 most Member States recorded return to quarter-on-quarter positive growth of GDP.

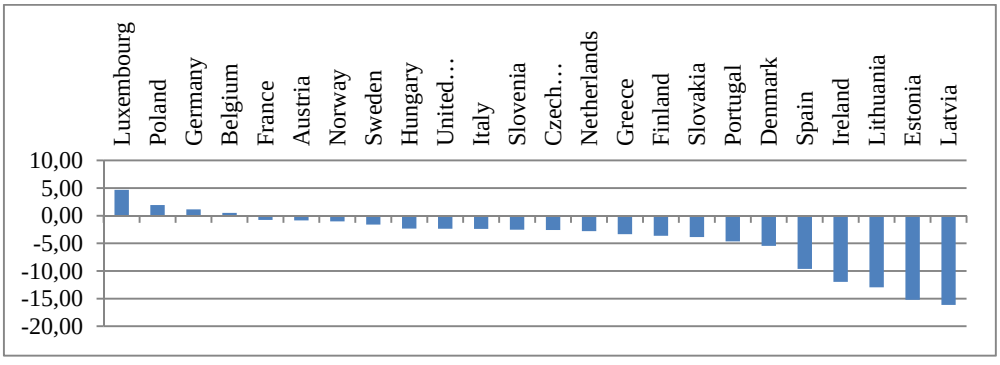
Employment reacted to fall in GDP with the usual lags. The largest fall in employment was recorded in Q1, Q2 and Q3 2009, with quarterly employment growth rates of -0.8%, -0.7% and -0.5% respectively (for EU27). In Q4 2009 and Q1 2010 contraction moderated and stopped (-0.2% and 0%, respectively).

However, the labour market impact of the crisis has been rather uneven among the Member States, which was the consequence of different policy responses to the crisis, varying levels of economic contraction, and differences in the structures of the economies.

Beside the Baltic States, Ireland and Spain experienced the greatest decline in employment (Figure 7). Despite the fact that the recession in observed period was deeper in Italy and the UK compared to that in Spain, labour market performance in those Member States during the crisis has been better. Also in France, employment deterioration was smaller. In Germany, employment losses have been mitigated in large extent by widespread use of reductions in working hours. Compared to Q2 2008 the level of employment by Q2 2010

was even slightly up (by more than 1%). Some Member States beside Germany (Belgium, Luxembourg and Poland), in spite of general trend of overall employment declines, in the same period registered employment recovery to the levels of mid-2008 or even recorded significant increases of employment levels.

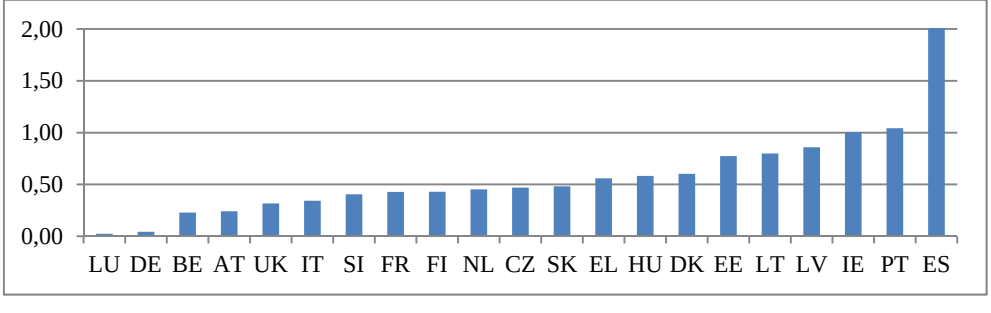
Figure 7: Change in employment Q2 2008-Q2 2010



Source: Eurostat, own calculations

Response of employment to GDP decline also varied across the countries (Figure 8). Reaction of employment to economic contraction was stronger in Spain, the Baltic States, Ireland, and Portugal. On the other side, employment declines relative to the fall in economic activity in Belgium, Austria, the UK, Italy, and particularly in Germany and Luxembourg, have been much smaller.

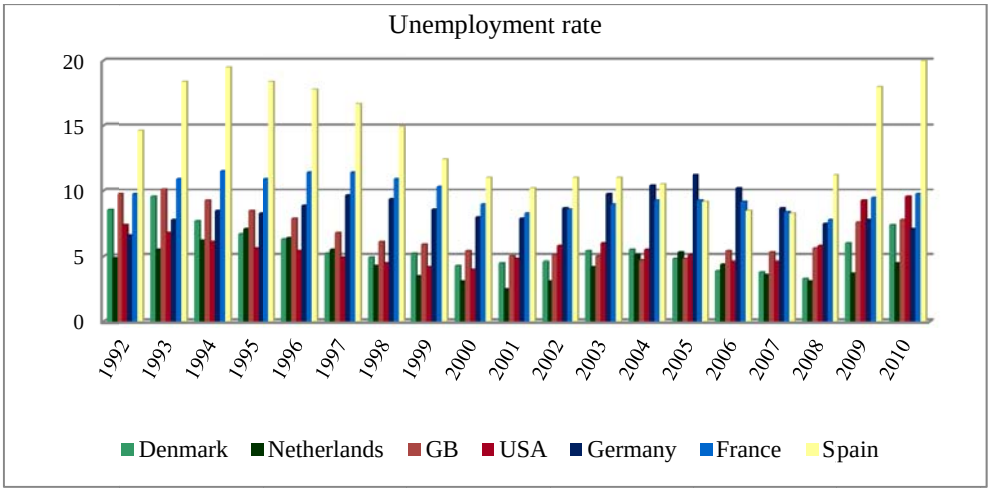
Figure 8: Elasticity of employment to GDP (employment declines to GDP contraction) in the period Q1 2008-Q2 2010



Sources: European Commission (2010), Eurostat, own calculations.

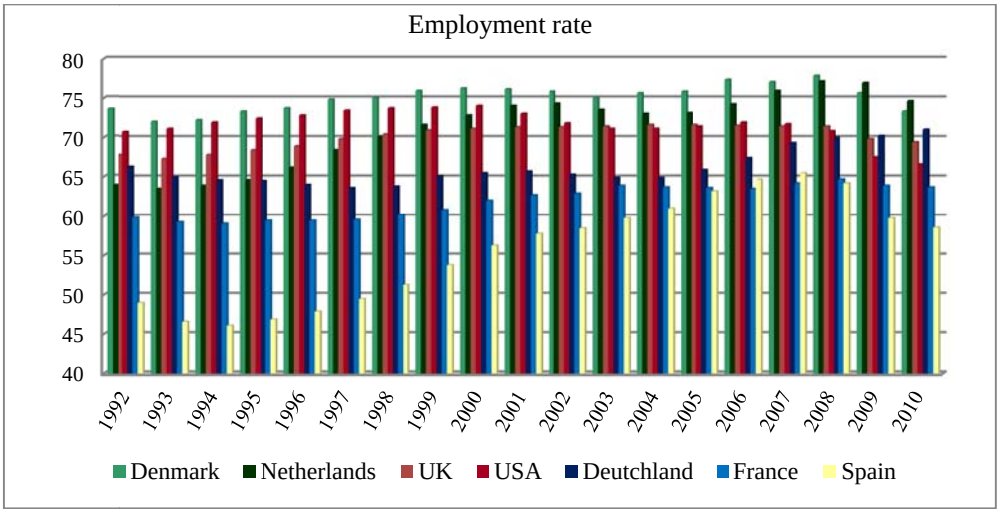
Unemployment and employment rates in various EU states (and USA) as representatives of specific labour market regimes are presented in Figure 9 and Figure 10.

Figure 9: Unemployment rates in selected EU countries and USA 1992-2010



Source: Eurostat

Figure 10: Employment rates in selected EU countries and USA 1992-2010



Source: Eurostat

When both indicators are taken together, best performers are Denmark and Netherlands – representatives of Nordic labour market regime and flexicurity model, with low unemployment and high employment rates. Relative position of Germany has improved after the recession.

In order to classify countries along flexibility and security axes and check if there is any significant link between country`s flexicurity position and levels and changes in unemployment and employment rates during the period 2008-2010, we carried out similar principal component analysis as described above. We used somewhat different indicators: overall EPL index (EPL), EPL index for regular contracts (EPL_{reg}), EPL index for temporary contracts (EPL_{temp}), expenditures for labour market policy as a percentage of GDP (GLMP), expenditures for labour market policy per person wanting to work (PPS), percentage of population engaged in formal or non-formal education and training, 15 to 64 years (LLL), and indicator IUB which comprises various aspects of unemployment benefit system generosity. Indicator IUB is defined as a product of standardized values of: average net replacement rate with social assistance in 2008, indicator of unemployment benefit duration in 2008 and indicator of unemployment assistance duration.

PCA methodology transforms correlated variables into a new set of uncorrelated variables (the principal components), using a covariance matrix or its standardized form – the correlation matrix. PCA analysis is carried out for 21 countries.

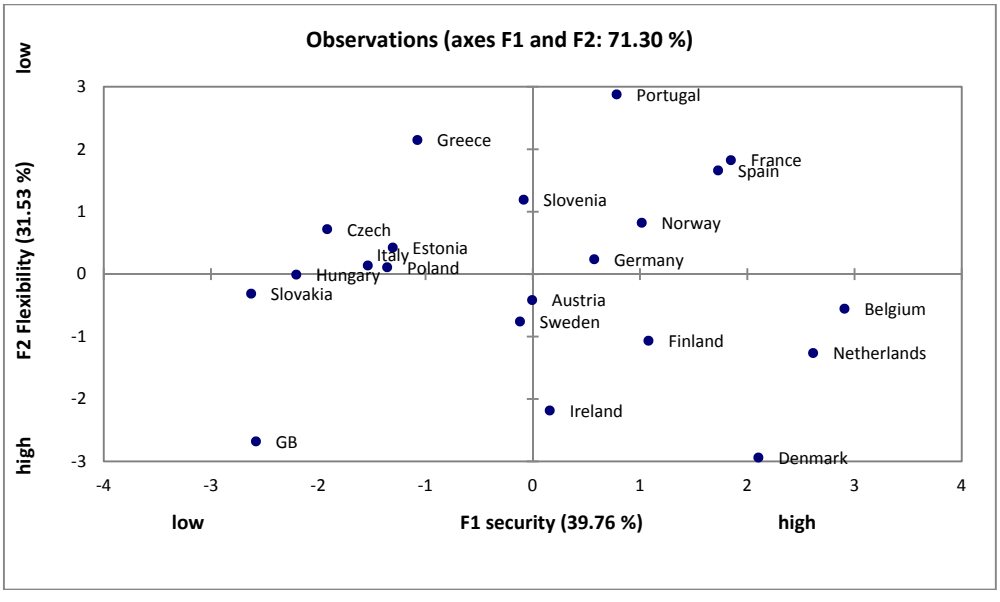
Table 5: Correlations between variables and factors

	F1	F2
EPL	0.441	**0.883**
EPLreg	0.125	**0.675**
EPLtemp	0.479	**0.663**
GLMP	**0.796**	-0.238
LLL	0.343	-0.571
PPS	**0.873**	-0.376
UIB	**0.911**	-0.086

Due to its positive correlation with labour market policy expenditures and generosity of unemployment benefit system, the first principal component (F1) can be interpreted as “security”. The second principal component (F2) can be interpreted as representing “in-flexibility” because of its positive cor-

relation with EPL indices. Also, negative correlation with LLL can be associated with inflexibility of labour market. Two principal components can account for 71.3% of overall variability of the original data. It is obvious that additional principal components are needed in order to cover higher percentage of overall variability of the original data. Beside the option to include more indicators, with data already included third principal component which is positively correlated with LLL could be added and additional 10% of the variability would be explained. This variable obviously needs greater attention since there is significant positive correlation between employment rates and LLL in period 2008-2010 (around 0.8), as well as negative correlation with long term unemployment in the same period (around -0.77).

Figure 11: Country scores along flexibility and security

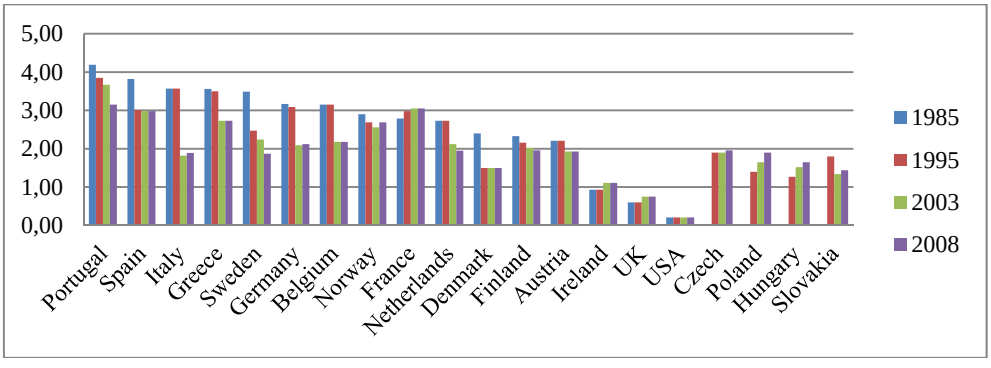


Positions of the countries along flexibility and security dimensions (F1 and F2) are similar as previously reported[11]. Components F1 and F2 account for 31.53% and 39.76%, respectively, of overall variability in the data (same percentage as in European Commission, 2006). Nevertheless, transition countries (new Member States) have moved to somewhat lower flexibility which is consistent with changes in EPL indices (Figure 12) – values of EPL index in these countries were raised in period 2003-2008, which means that

[11] Note that flexibility axis is reversed (compared to Figure 4).

employment protection legislation became to some extent more rigid. One should bear in mind that EPL index doesn`t cover all the aspects of labour market flexibility (atypical forms of employment, collective bargaining agreements, grey economy, etc.)[12].

Figure 12: Change in overall EPL index



Source: OECD database

On the security axis, besides expenditures on labour market policies, various aspects of unemployment benefit system have been taken into account, which to some extent changed country scores. For example, unemployment assistance duration in Ireland is of no limit up to the age of 66, which has contributed to movement to quadrant with higher security. Similar example is Belgium, where duration of unemployment benefits is also unlimited. Analysis could be enhanced with inclusion of coverage of unemployment protection schemes. One should also bear in mind that unemployment benefit system is very complex and hard to capture quantitatively and the same holds true for capturing security dimension of the labour market.

We also considered supplementary variables whose aim is to capture labour market outcomes (effects). In contrast to variables used to identify principal components, supplementary variables do not influence the taxonomy of countries. Correlation coefficients between principal components and the factor scores obtained for supplementary variables are examined.

[12] For more details see Venn (2009) and Boeri and Van Ours (2008).

In European Commission (2006) correlation coefficients between chosen supplementary variables and flexibility/security components are as follows (Table 6).

Table 6: Correlation coefficients between (factor scores of) supplementary variables and the principal components (1)

	Security	Flexibility/Employability
Employment rate	0.79	0.25
Unemployment rate	-0.45	-0.15
Long-term unemployment	-0.57	-0.23

Source: European Commission (2006), p. 108.

Supplementary variables were calculated as annual averages over the 1997–2003/2004 period[13]. We performed similar analysis for period 2008-2010.

Table 7: Correlation coefficients between (factor scores of) supplementary variables and the principal components (2)

	Security	In-Flexibility
Employment rate	0.446	-0.348
Unemployment rate	-0.196	0.302
Long-term unemployment	-0.350	0.403

Correlation coefficients are significantly different compared to previous results which can be the consequence of different active variables, additional three countries included into analysis and different and shorter time span. However, signs of correlation coefficients are the same in these two analyses, and we could conclude there are indications that there is a positive correlation of both security and flexibility scores with employment rates, and negative correlation with long-term unemployment rates. Also, important conclusion is that there does not seem to be any trade-offs between security and flexibility.

Further research in this field is needed, since a word of caution is necessary concerning robustness of this type of methodology. The results are often sensitive to the particular choice of parameters. Some possibly useful and rele-

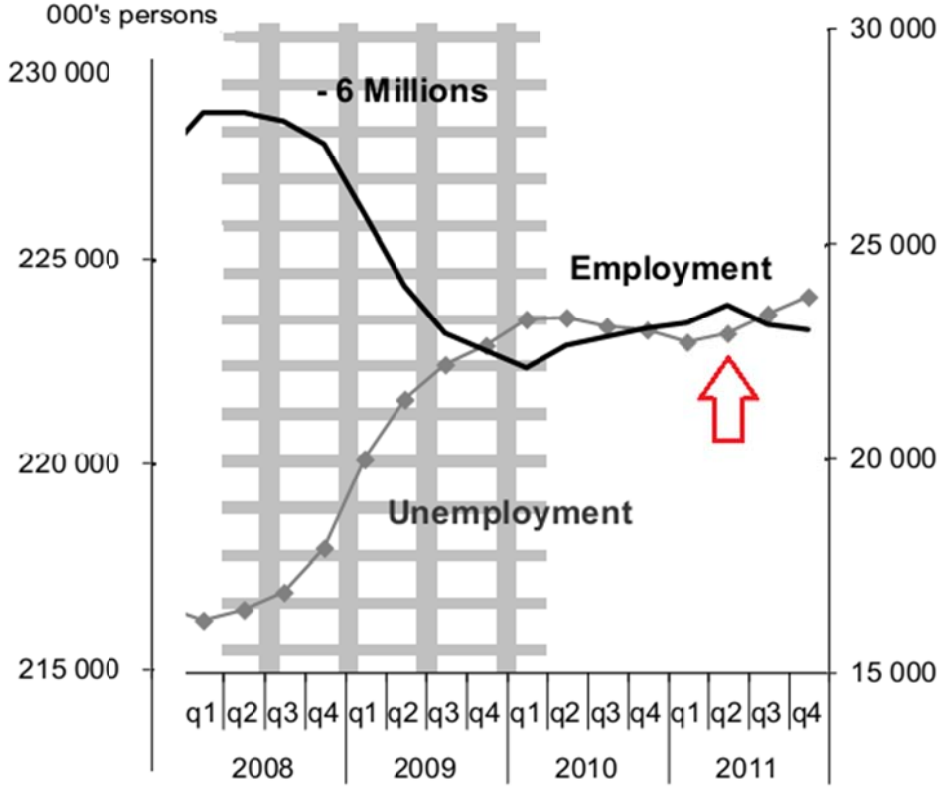
[13] For results concerning other supplementary (outcome) variables (PISA results, reduction of poverty risk, GINI coefficient on income inequality, women employment rate, youth employment rate, etc.) see European Commission (2006).

vant parameters were not included in this analysis due to insufficient data. Also, this methodology is based on correlation coefficients and it gives no proof or direction of possibly existing causal relationship.

Labour Market Performances in the Period Q2 2010-Q4 2011

The EU saw employment growth return in the Q2 2010, three quarters after GDP growth restarted. However, after a mild recovery between spring 2010 and summer 2011, in the second half of 2011 employment again declined (Figure 13).

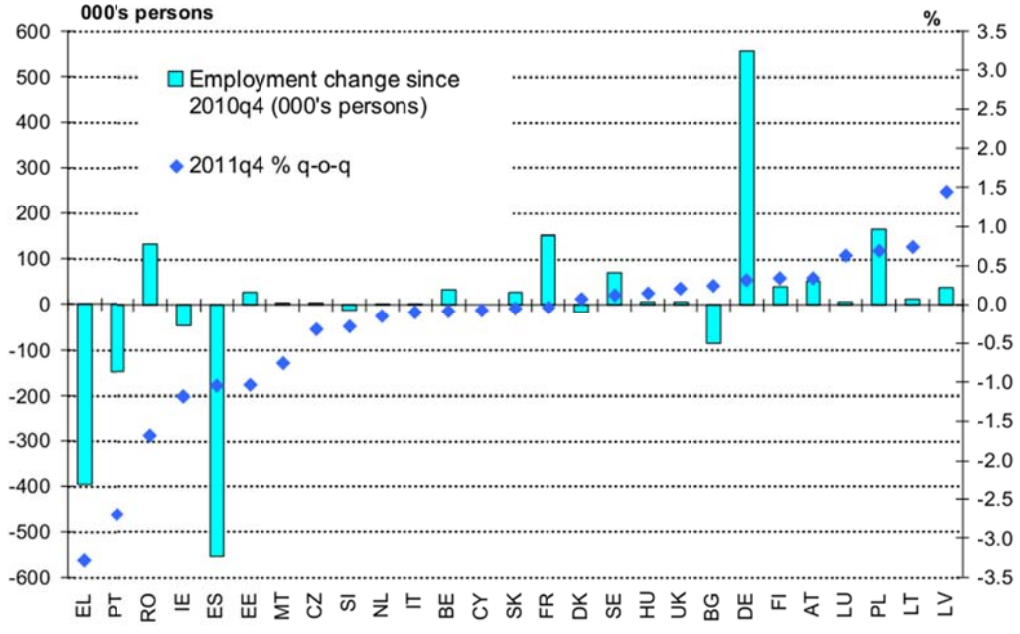
Figure 13: Employment and unemployment in the EU until the end of 2011



Source: European Commission (2012), p. 12.

Across Member States, the situation has been very uneven.

Figure 14: Employment change in Q4 2011 (yearly change, 000's persons) and quarterly change (%, q-o-q) in the Member States



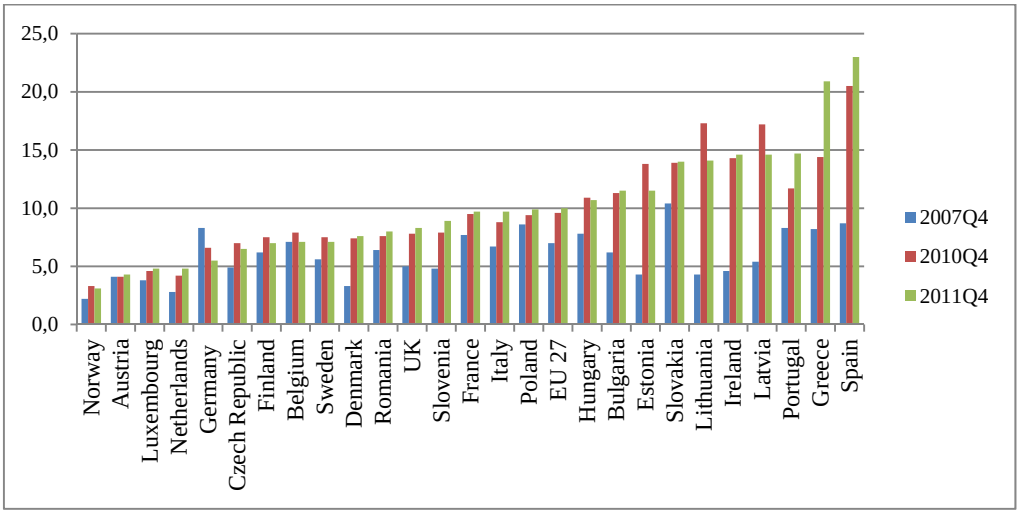
Source: European Commission (2012), p. 13.

The main contributor to EU employment growth in 2011 was Germany, followed by Poland, France, Romania, Sweden and Austria. On the other hand, Spain, Greece, Portugal, Ireland, Bulgaria, Slovenia and Denmark recorded significant employment losses.

In Q3 2011, the EU employment rate was below that of Q3 2008, but still unchanged compared to Q3 2010. In the third quarter of 2011, only five Member States posted an employment rate that was higher than three years before: Germany recorded the highest increase with +2.2 pps, followed by Malta, Luxembourg, Austria and Poland.

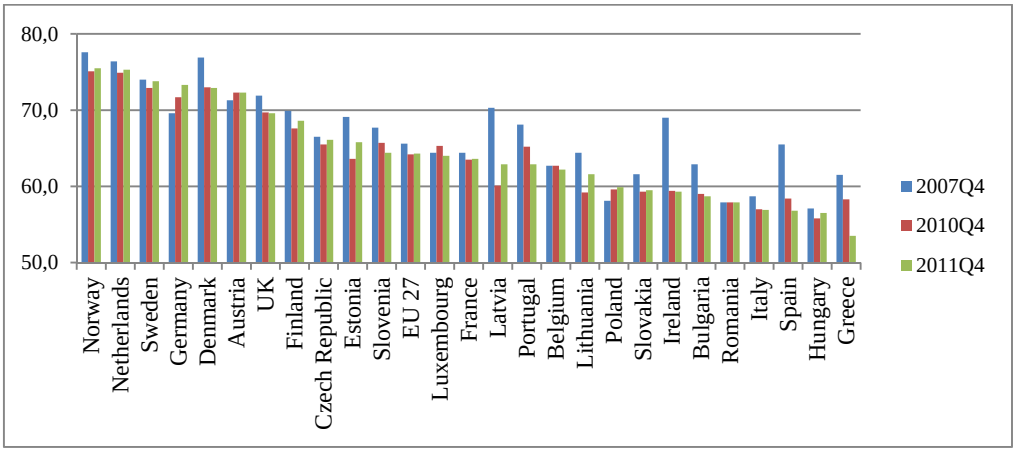
Since spring 2011, the number of jobless has again steadily risen and the unemployment rate hit a new high at 10.1 % in the EU in January 2012. Latest unemployment and employment rates data are shown on Figure 15 and Figure 16.

Figure 15: Evolution of unemployment rates: Q4 2007 – Q4 2011



Source: Eurostat

Figure 16: Evolution of employment rates: Q4 2007 – Q4 2011



Source: Eurostat

Although the picture is not quite clear, it seems that Mediterranean labour market regime have had the worst labour market performance. Within the other labour market regimes results have been rather uneven, but we might say that Nordic and Continental regime tend to have higher employment and lower unemployment rates, as well as a smaller employment contraction (Figure 7) compared to Anglo-Saxon one. However, one must be careful with

definite conclusions, since there are more labour market indicators that could be included into analysis and, besides institutional settings responsible for belonging to specific labour market regime, a lot of other factors influenced labour market performance during the crisis.

Conclusion

Reaction of European labour markets on economic crisis 2008-2009 varied across the Member States. Institutional settings, among other factors (specific macroeconomic shocks, structure of economy, economic policy response), influenced labour market outcomes. We tried to capture flexibility and security dimensions of labour markets and examine their link with labour market performance during the crisis. Results of the analysis indicate that there is probably no trade-off between flexibility and security. Although results should be taken with caution due to shortcomings of the methodology and the fact that these two dimensions of the labour market are difficult to capture quantitatively, the main policy conclusions are that:

- there is no one-size-fits-all institutional setting which guarantees best performance;
- liberal/orthodox policy recommendations that emphasize role of primarily external labour market flexibility should be taken with caution and specific characteristics of the economy should be taken into account.

Labour market outcomes within different labour market regimes during the crisis varied across the countries, but there are indications that regimes characterized with higher security had better results. Also, our analysis included only external forms of flexibility, but it is important to emphasize that increased internal flexibility (extensive use of short-time working schemes) have had important role in mitigating employment losses during the crisis. However, a lot of other factors influenced labour market performances, and further research in this area is needed to reach definite conclusions.

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