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Labour Market Developments in Europe, 2011

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SUMMARY AND MAIN FINDINGS

In 2010 EU labour markets lagged behind while economic growth was resuming, but there are signs of an incipient employment recovery...

Employment in most EU countries proved considerably resilient immediately after the 2008 recession, notably in light of the strong adjustment of hours worked, in some cases facilitated by the operation of government sponsored Short Term Working schemes. Labour shedding became more relevant at the end of 2009 and employment did not resume until the last quarter of 2010. The belated response of employment to the recovery was the counterpart of labour hoarding during the recession and was accompanied by a considerable rebound in labour productivity. In both the euro area and the EU, the unemployment rate in 2010 remained persistently high, close to 10%, with no substantial improvement compared with 2009, including in light of highly resilient participation rates.

Headcount employment started rising in late 2010, as soon as the growth of working hours was levelling off, and is expected to gain momentum in 2011 and 2012. Nonetheless, the employment recovery is not expected to be sufficiently strong to bring about a significant reduction in the unemployment rate over the medium term. The speed at which unemployment will go back to pre-crisis levels will depend not only on the growth outlook but also on the presence of supportive policy frameworks.

...which however will hardly contribute to narrow the dramatic differences in unemployment rates across EU Member States

In spite of these general trends, the labour market situation in the euro area and the EU exhibits an unprecedented degree of diversity. Unemployment divergences are large and persistent, reflecting not only the asymmetric effects of the crisis and different constraints for the financial sector and fiscal policy, but also cross-country differences in the sectoral composition of past employment losses and different institutional settings.

The labour market deterioration following the crisis proved particularly acute in the Baltic countries, Spain, Ireland, Greece. Considerable job losses were recorded also in Bulgaria, Denmark, Portugal, Slovakia, the UK. Labour markets were

instead particularly resilient in Germany, Austria, Malta, Luxemburg. In general, the countries hit by the burst of housing bubbles and constrained in their policy manoeuvre by external and fiscal imbalances are those where job losses were the most severe. Seven countries in 2010 exhibited unemployment rates above 12 % (the three Baltics, Spain, Ireland, Greece, Slovakia). The unemployment rate is below 8 % (i.e. below the value prevailing before the crisis in the EU on average) in 11 countries. The unemployment rate is back at or below pre-crisis levels in Austria and Germany.

Looking forward, the employment recovery is expected to follow different patterns in different countries, reflecting the current multi-speed output recovery. No significant reduction in unemployment disparities is in sight. While the prospects appear relatively rosy in the Baltics, unemployment is expected to further grow in Spain, Ireland, Greece and Portugal in 2011. The unemployment rate of Germany, at the record level of 7.1% in 2010, a value not reached since the early 1990s, is expected to further fall in 2011 and 2012.

Wage moderation, coupled productivity improvements, create the conditions for stronger labour demand looking forward and cost competitiveness gains

Nominal wage growth remained muted in 2010, amid compressed or even negative wage dynamics in the public sector. Although there was evidence of adjustment in nominal compensations to the labour market slack already in 2009, bargained wages in the euro area started adjusting only in 2010. In spite of the considerable productivity growth, real wage dynamics further slowed down in 2010 in the euro area and the EU. The wage moderation trend started in 2009 is consistent with the priority of reducing unemployment, but it is only since 2010 that real wage adjustment became clearly stronger in countries with worse unemployment problems.

Reductions in nominal compensation per employee were recorded in 2010 in the three Baltics, Greece, Ireland, Malta, and Hungary, largely as a result of salary cuts in the public sector. Sustained nominal wage increases were instead registered in Bulgaria, Poland, Slovenia, the UK, Cyprus, the Czech

Republic. Real compensations per employee deflated by producer prices fell in 13 EU countries. Real unit labour costs fell in most Member States, which means that the real wages did not keep up with productivity in most EU countries. In general, the degree of adjustment in real unit labour costs reflects the magnitude of unemployment. However, while in some high unemployment countries the adjustment was comparatively strong (the Baltics), in others it was weaker than that recorded in countries with low unemployment (Spain, Slovakia, Ireland).

The remarkable productivity improvement, coupled with wage moderation, resulted in a reduction in unit labour costs for the euro area and the EU, the first since mid 1990s. The euro area as a whole witnessed an improvement in cost competitiveness above 7%, when measured in terms of unit-labour-cost-deflated real effective exchange rate. These developments seem also supportive to the external rebalancing of EU economies: the competitiveness gains were in general more marked in countries with larger current account deficits. These competitiveness gains are however likely to be short-lived since the productivity boost of 2010 is largely the results of a rebound in working hours after labour hoarding during the crisis.

Key challenges ahead include avoiding unemployment becoming entrenched, keeping activity rates high, fighting precariousness and job insecurity...

The fact that participation rates remained high after the recession bodes well for the recovery. During the recession, labour supply actually increased in many EU countries in spite of job shedding. Older workers' participation rose partly because of reforms in retirement age and early retirement schemes, partly because of concerns about pension income following the losses of pension funds during the crisis. The labour supply of women seems to have responded in such a way to compensate higher income and employment risk of men. This resilience of activity rates is a distinguishing feature of the EU compared with other world areas, notably the US. The fact that participation rates remained high while employment was falling contributed to high unemployment figures. However, the resilience of participation rates will be a key factor to ensure

that employment rates resume to pre-crisis values and to permit a further growth in line with EU2020 targets.

Worsening labour matching and rising structural unemployment raises the question how fast pre-crisis employment rates could be obtained looking forward. The evidence suggests that labour market matching has been worsening in the euro area, as there is more and more unemployment for the same number of vacancies. In spite of a considerable reduction in job separation rates after the recession, job finding rates remained low and unemployment duration has been on the rise. The increase in the frictional unemployment was accompanied by rising estimates of the NAIRU, the concept of structural unemployment consistent with stable prices. Looking ahead, these trends pose the question whether a phenomenon of "unemployment hysteresis" will repeat in Europe as in the eighties following the stagflation induced by the oil shocks. The risk is there that, in spite of a cyclical rebound, unemployment could remain persistently above pre-crisis levels. Moreover, the fact that long-term unemployment is on the rise brings the risk that an increasing number of workers would become discouraged or hardly employable, thus exiting the labour force, which will impinge upon the recovery of employment rates looking forward.

The quality of new jobs created will also be key to ensure that the recovery coincides with reinvigorated income prospects, notably for the low skilled and the young. The bulk of job losses since the crisis were registered among the low skilled, in particular for those employed with temporary contracts. The young were also comparatively hardly hit by the crisis as more frequently employed with temporary contracts as compared with other age groups. The strong and persistent fall in job creation coupled with temporary job shedding led to a major increase in the youth unemployment rate in most EU countries, reaching worrisome levels in Spain, the Baltics, Greece, Slovakia, Italy, Ireland. The jobs created since the economic recovery started are to large extent temporary and part-time jobs and the question is open on the extent to which future job growth will offer stable income prospects.

...which will require putting in place supportive policy frameworks

In line with the recommendations contained in the European Economic Recovery Plan, Member States put in place after the crisis a series of measures to contain the impact of the financial crisis on aggregate demand and prevent excessive labour shedding in response of a temporary contraction of output. Consistently, Short Term Working Schemes were introduced or strengthened in a number of countries and the coverage and generosity of unemployment benefit systems increased.

The incipient output recovery, coupled with mounting fiscal imbalances led to a revision in policy priorities. Many of the emergency labour market measures taken after the financial crisis were gradually phased out; active labour market and training policies strengthened in some cases; some countries started reforming employment protection systems with a view to foster job creation and fight labour market segmentation.

The 2011 Commission Annual Growth Survey includes a series of priorities for reform in EU that concern labour markets: wage developments consistent with the rebalancing and adjustment needs of the economy; tax and benefit systems that ensure that work pays off; unemployment benefit systems and activation policies that reward the unemployed going back to work; employment protection systems aimed at balancing security with flexibility. The policy measures announced by Member States in 2011 in their National Reform Programmes by Member States broadly reflect that the priorities set out in the Annual Growth Survey. In line with the priorities in the Integrated Guidelines and the Annual Growth Survey, and on the basis of an assessment of existing challenges and ongoing reform actions, the Commission issued a series of Country Specific Recommendations to Member States in the field of labour market policies within the revamped framework for EU surveillance of economic and employment policies.

Analytical focus 1. Unemployment benefits: reform challenges after the crisis

The present issue of this report includes analytical chapters focusing on two policy topics of particular relevance in the current juncture: unemployment benefit schemes and wage setting frameworks.

Most European countries operate unemployment benefits systems. However, there are considerable differences not only in terms of their generosity (eligibility conditions, benefit net replacement rates benefit duration), but more fundamentally, in the composition of instruments used (unemployment insurance, unemployment assistance) and design of schemes (modulation of benefits during the unemployment spell, link of benefits to past earnings...).

Unemployment benefits present a trade-off between income smoothing and economic efficiency, as the positive stabilisation effects may imply weakened incentives to search and accept jobs for the unemployed. However, the design of the unemployment benefit system (e.g. benefit net replacement rates falling over the unemployment spell) and the presence of flanking policies, notably effective activation policies, may substantially help addressing this trade off.

The system of unemployment benefits plays a key role as fiscal stabiliser. After the financial crisis of 2008, in line with the recommendations in the Commission European Economic Recovery Plan, several EU Member States adapted their unemployment benefit system to ensure effective stabilisation in response to a major recession, which required in some cases increasing benefit coverage and extending generosity and duration of entitlements.

Looking forward, priorities are changing. As stressed in the 2011 Commission Annual Growth Survey, reforms will have to be appropriate to a context where growth is gradually resuming but labour is not yet giving its full contribution to the growth potential due to high and persistent unemployment. Consistently, the recommendations in the Annual Growth Survey reflect the need to shift the emphasis on reforms aimed at strengthening incentives in the labour market: benefit design and activation policies encouraging the unemployed to go back to work; tax and benefit systems ensuring that work pays; unemployment insurance that adequately adapts to changing economic conditions.

Analytical focus 2: Wage setting, competitiveness, macroeconomic imbalances

Labour market conditions vary dramatically across EU countries. The current impressive differences in unemployment rates in the euro area are largely the result of idiosyncratic shocks of unprecedented scale in a monetary union. A number of EU countries also have to complete a durable adjustment of large external imbalances. Against this background, consistent wage dynamics are key both for the absorption of unemployment and for the adjustment of price competitiveness in countries with large imbalances.

The above priorities were reflected in the 2011 Annual Growth Survey and in the Joint Employment Report, as well in Country-Specific Recommendations in the framework of the Broad Economic Policy Guidelines and the Employment Guidelines. Looking ahead, a proper understanding of the links between policies, wage dynamics, competitiveness and imbalances will be key for a successful implementation of the Excessive Imbalances Procedure (EIP).

The last part of the present report discusses the interaction between wages, price competitiveness and imbalances, focusing both on issues relating to the assessment of wage dynamics in light of the need of correcting macroeconomic imbalances and on the role of government policies and wage setting frameworks in triggering appropriate wage dynamics

As wages are driven by the market mechanism and interact with the rest of the economy, a good understanding of the complex interlinks between wages, competitiveness and imbalances is needed when assessing determinants and implications of wage developments. In this respect, the comparison of actual wage trends with appropriate benchmarks (notably permitting to check whether wage developments are consistent with the balance between labour supply and demand, with orderly competitiveness dynamics, with standard relations with economic fundamentals) seems desirable.

Policy action in the field of statutory minimum wages, government wages, labour taxes can have in principle a direct impact on labour cost developments, but the overall impact on competitiveness and imbalances will depend also on other relevant transmission channels.

Although the assessment of the implications of wage bargaining characteristics on wage developments is notoriously complex, and there is no strong evidence in support of a single, superior wage setting model, fresh analysis carried out in this report suggests that a few elements of wage bargaining frameworks (notably affecting the coverage of collective agreements) may have an impact on wage outcomes over the medium-to-long term, while other aspects (notably the centralisation and coordination of wage setting and indexation clauses) matter for the extent to which wages respond to fundamentals.

Part I

Labour market developments

1. LABOUR MARKET CONDITIONS IN THE EURO AREA AND THE EU

1.1. INTRODUCTION

The consequences of the financial crisis for the real economy were fully felt in 2009, when GDP declined at an unprecedented annual rate on both sides of the Atlantic. Employment proved very resilient in Europe immediately after the recession, with the bulk of the adjustment taking place in working hours.

Since the second half of 2009, however, job shedding became widespread and unemployment shot up in most EU countries, albeit with large differences. The recovery gained momentum in the first half of 2010 but stabilised in the remaining part of the year, also reflecting the fading of the temporary factors that jump-started the recovery, such as the exceptional stimulus measures. Despite output recovery, employment growth did not follow until late 2010, and unemployment remained at the high levels reached in 2009.

Against this background, this chapter will analyse the anatomy of the current labour market adjustment by looking at aggregate developments in the EU and the euro area. In doing so, this chapter seeks to identify the key adjustment margins that are characterising the recent phase of economic recovery of the EU and euro area economy both in terms of price and quantities.

The remainder of the chapter is organised as follows. The next section compares aggregate labour market developments in the euro area and the EU with those taking place in other world areas. Section 1.3 analyses employment and unemployment dynamics, while section 1.4 reviews latest trends in wages and labour costs. Section 1.5 focuses on salient aspects of European unemployment, analysing job market flows, long-term unemployment and labour market matching. A concluding section follows.

1.2. SETTING THE SCENE: THE EU LABOUR MARKET IN AN INTERNATIONAL PERSPECTIVE

Although the major headwinds following the acute phase of the financial crisis are abating, the labour market outlook remains fragile and uneven in many advanced areas, and new risks are looming on the horizon.

In many advanced economies, job creation was so far insufficient to hire back the workers laid off during the crisis, and the consequences of the recession are increasingly raising concern about the possibility of persistent effects on unemployment rates (Table I.1.1).⁽¹⁾ Conversely, in major emerging countries strong economic growth is spurring a rapid labour market recovery from the job losses suffered during the recession mainly in the export sector. By the end of 2010, in most of these economies unemployment and employment were back to pre-crisis levels.

Table I.1.1: **GDP growth and unemployment in selected countries**

	GDP growth		Unemployment rate	
	2000-2007	2010	2000-2007	2010
EA17	2,2	1,7	8,6	10,1
EU	2,4	1,8	8,6	9,6
CAN	2,9	3,0	6,9	8,0
JPN	1,7	3,9	4,7	5,1
USA	2,6	2,7	5,0	9,6
OECD	2,5	2,7	6,7	8,6
BRIC:	8,0	8,7	:	:
BRA	3,5	7,4	10,4	6,7
RUS	7,2	3,5	8,2	7,5
IND	7,1	8,5	:	:
CHN	10,5	10,5	3,9	4,1

Source: Eurostat and OECD.

In spite of resumed growth in the EU, job creation has recovered very timidly (Graph I.1.2) and the unemployment rate remained broadly stable in 2010. By looking at the quarter on quarter percentage changes in employment in Table I.1.2, it is evident that the number of employed persons was broadly stable over 2010, with some evidence of a recovery only in the fourth quarter. However, as the fall in employment levels was very acute during the course of 2009, the quarterly growth

⁽¹⁾ Those concerns are echoed, inter-alia, in the analyses found in OECD (2011), European Commission (2010), IMF-ILO (2010).

Table I.1.2: Unemployment, compensation per employee and GDP growth in the euro area and European Union

		Quarter over quarter of previous year									quarter over quarter same year				
		2008	2009	2010	2011	2010q1	2010q2	2010q3	2010q4	2011Q1	2010q1	2010q2	2010q3	2010q4	2011q1
Unemployment rate	EA	7.6	9.6	10.1	10.0	10.6	10.0	9.8	10.1	10.0	0.7	-0.6	-0.2	0.7	0.3
	EU	7.1	9.0	9.6	9.5	10.2	9.6	9.4	9.6	9.5	0.8	-0.6	-0.2	0.2	-0.1
Unemployment growth (LFS)	EA	1.5	26.3	6.1	-0.5	12.9	7.0	3.0	1.7	:	6.7	-5.3	-2.4	3.1	:
	EU	-1.2	28.1	7.7	-0.9	16.2	8.7	3.9	2.4	:	8.3	-5.2	-2.1	1.9	:
Growth of nominal compensation per e	EA	3.4	1.8	1.6	2.1	1.7	1.9	1.4	1.4	1.8	0.3	0.5	0.1	0.5	0.6
	EU	0.7	-1.1	3.2		3.5	3.4	3.1	2.9	2.4	1.4	0.9	0.6	0	0.9
GDP growth	EA	0.4	-4.1	1.8	1.6	0.8	2.0	2.0	1.9	2.5	0.3	1.0	0.4	0.3	0.8
	EU	0.5	-4.2	1.8	1.8	0.7	2.0	2.2	2.1	2.5	0.4	1	0.5	0.2	0.8
Employment growth	EA	0.8	-1.9	-0.5	0.3	-1.3	-0.6	-0.1	0.3	0.3	0.0	0.1	0.0	0.2	0.0
	EU	0.9	-1.8	-0.5	0.4	-1.5	-0.6	-0.1	0.3	0.4	-0.1	0.2	0.1	0.1	0.0

(1) The changes in the unemployment rate are in pps for the other variables the changes are in per cent.

Source: Eurostat and AMECO.

rates year over year were negative for all the first three quarters of 2010, both in the euro area and the EU. The annualized quarterly growth rate in unemployment was instead positive in all 2010 quarters, while quarter on quarter changes followed a discontinuous pattern, with mild reductions recorded in mid-2010.

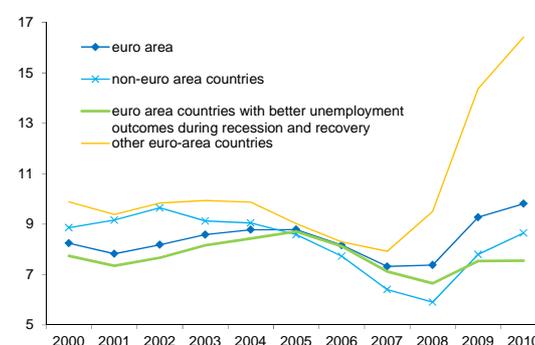
Looking at overall unemployment figures in the euro area and EU the picture appears worrisome. At the end of 2010, the unemployment rate was on aggregate 10.1 and 9.6 for the euro area and the EU, respectively. The number of euro-area unemployed was 13 millions, 22 millions in the EU. The unemployment rate reached record levels among the youth: the unemployment rate of young adults (aged 20-24) reached 19.4% and 19.2% in the euro area and the EU respectively, a figure about twice as large as that for the total unemployment rate; about 1 out of 5 young adults is unemployed.

Aggregate EU unemployment data conceals major differences in developments at country level. In particular, it is remarkable the large and rising dispersion of unemployment rates within the euro area after the recession, which appears to be still growing also during the recovery (Graph I.1.1). The widening differences in unemployment rates cannot be explained by GDP developments alone. Other relevant factors include differences in the extent of adjustment of working hours, different needs of relocating labour across sectors, notably away from construction, different economic and institutional starting conditions and heterogeneous policy responses since the crisis.

In the United States, the impact of the global recession on employment was more abrupt than in the EU, notably in light of a more contained adjustment of working hours. In spite of this strong

adjustment in headcount employment following the financial crisis, the labour market showed signs of only modest recovery throughout 2010 also in the United States. Job losses fell in construction and financial services while manufacturing, retail trade and leisure and hospitality started to create jobs. However, the revival of employment growth in the first half of the year turned out to be short-lived and the employment recovery, which began in February 2010, appears weaker than in previous economic recoveries. ⁽²⁾

Graph I.1.1: Unemployment rates in EU



(1) The solid line is for countries with a change in unemployment in 2008 and 2009 better than the median; these are BE, DE, FR, IT, LU, MT, NL, AT and FI.

Source: Commission services' on Ameco.

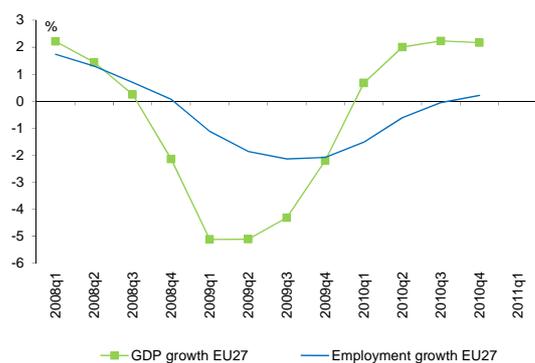
At the end of 2010, the unemployment rate in the United States declined to 9.6%, only mildly from the record high of 10% one year earlier. This decline was partly due to a fall in the participation rate (0.4 pps lower than one year earlier). ⁽³⁾ This

⁽²⁾ Through December 2010, in the United States employment increased 0.8% from the trough; over the past four recoveries, average employment growth from the low point was 1.9%; only the recovery that started in May 1991 was weaker.

⁽³⁾ In December 2010, the US participation rate reached 64.3% of the population aged 16 years and over; this is the lowest rate since April 1984.

is a major difference compared with the EU, where participation rates were generally resilient. It is also noteworthy the considerable increase in the US number of long-term unemployed and in unemployment duration in 2010, tendencies that are also common in the EU (see next section).⁽⁴⁾

Graph I.1.2: Employment and GDP growth in the EU



Source: Eurostat and OECD.

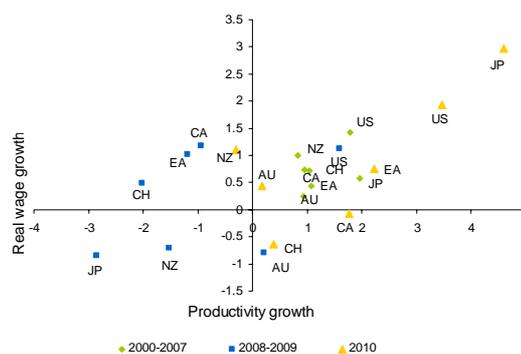
In Japan, the significant loss of output in 2009 (-6.3%) resulted in a small pick up in unemployment owing to labour hoarding. For this reasons, in 2010, the economic recovery in this country was accompanied by a substantial increase in productivity (4.6% compared to -5% of one year earlier). From the second half of 2009, other industrialised countries have witnessed a cyclical recovery, and in 2010 unemployment was above the pre-crisis average in most of them (notably, Canada, Australia, and New Zealand).

Looking at developments in real wages, there is evidence of a quite different adjustment patterns taking place across advanced economies between the recession and the recovery (Graph I.1.3). In the euro area, during the crisis productivity declined while real wages increased. In the United States relatively stable real wages were associated with a massive reduction in the headcount employment and limited decline in productivity during the recession. In Japan, the limited adjustment in headcount employment during the crisis was accompanied by a decline in productivity and a decline of real wages. In New Zealand, Australia

⁽⁴⁾ See also Casaux and Turrini (2011) for a comparison of transformations in unemployment structure and duration in the EU and the US.

and Canada, real wages reacted fast and considerably to a slack labour market.

Graph I.1.3: Real wages and productivity growth in the euro area and selected advanced countries



Source: Ameco.

The adjustment patterns in wages taking place during the recession appear to have had implications for those observed during the recovery, as suggested by the contrast between the moderation in real wages in the euro area and the strong increase in real wages in Japan and the United States.⁽⁵⁾

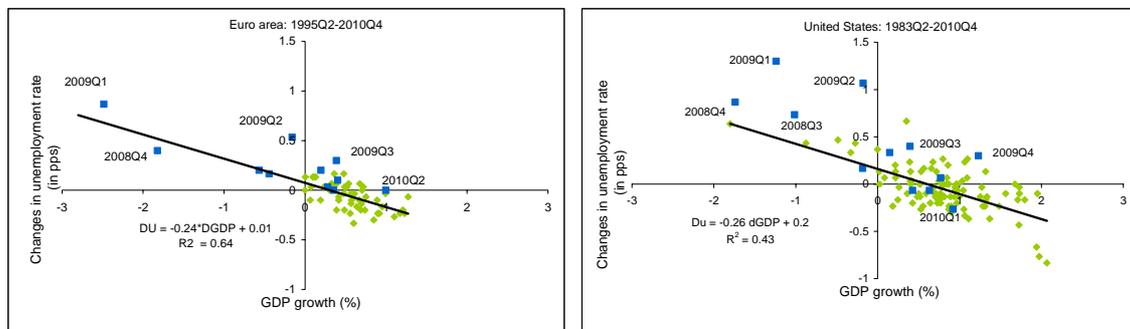
1.3. EMPLOYMENT AND UNEMPLOYMENT

1.3.1. Employment dynamics

The counterpart to the resilience of the EU labour market during the recession, largely due to the widespread reduction in working hours, was the weak employment growth during the recovery. Employment was broadly stable until the last quarter of 2010, where, quarter on quarter, it grew only by 0.2 and 0.1% in the euro area and EU, respectively. At the end of the year, employment in the EU was still 5 million below the peak achieved in the second quarter of 2008. The employment rate for the age group 20-64 in 2010 reached 68.5% for both the euro area and the EU, about 1 pp below the level recorded in 2008.

⁽⁵⁾ According to a survey done by the ESCB (2009), 37.1% of reporting firms in the euro area left unchanged their nominal wages over the summer 2009 and 43.1% announced that they planned to do so; only 5.6% of reporting firms declared that they made or planned to make wage cuts; since German firms are not in the sample aggregate results may be biased.

Graph I.1.4: Okun's law in the euro area and the United States



Source: Commission Services.

In spite of the economic recovery in the export oriented industries, driven by the strong dynamics of global growth and world trade in the first half of the year, the demand for labour in these industries continued to be lacklustre. Employment in manufacturing continued to decline, although at a lower pace, while a pick up in employment was recorded only in financial and real estate services (Table I.1.3).

Table I.1.3: Employment and value added in sectors

	2000-2007	2008	2009	2010
	Employment growth			
All NACE activities	1.0	0.9	-1.8	-0.5
Industry (except construction)	-0.8	-0.1	-5.2	-2.9
Manufacturing	-0.7	-0.1	-5.5	-3.1
Construction	2.2	0.3	-5.1	-3.4
Wholesale, retail trade; hotels and restaurants;	1.3	1.3	-1.7	-0.6
Financial intermediation; real estate	3.2	2.7	-1.6	1.1
Public administration, community services; activities of households	1.4	1.0	1.3	1.2
Services	1.8	1.5	-0.4	0.5
	Value added growth			
All NACE activities	2.4	0.7	-4.3	1.9
Industry (except construction)	2.1	-1.7	-12.3	6.0
Manufacturing	2.4	-2.3	-13.3	6.3
Construction	1.8	-0.7	-6.6	-2.7
Wholesale, retail trade; hotels and restaurants;	3.0	0.8	-5.1	2.0
Financial intermediation; real estate	3.4	1.9	-2.2	0.9
Public administration, community services; activities of households	1.5	1.6	1.1	1.2
Services		1.5	-2.1	1.3

Source: Eurostat.

1.3.2. Assessing the response of unemployment to the cycle

A better understanding of how the jobless rate has responded to the recovery can be obtained from Okun's law, linking the percentage change in output with the percentage point shift in the unemployment rate. This relationship describes well the historical data up to the recession (Graph I.1.4). The EU and the euro area unemployment

was off track only temporarily in 2009. ⁽⁶⁾ From 2010Q1 to 2010Q4 output increased in the EU by 1.7%, while the unemployment rate declined as predicted by the Okun's relationship by 0.6 pps. Thus the exceptional resilience immediately after the financial crisis has been followed by considerable job shedding in 2009 and a broadly standard response during the 2010 recovery. This contrasts with the developments in the United States, where, from the second half of 2008 through all 2009, unemployment has been considerably higher than what implied by Okun's law; only in 2010 was the rebound in the economic activity accompanied by a change in unemployment consistent with that relationship.

Different factors may explain the departure from Okun's law.

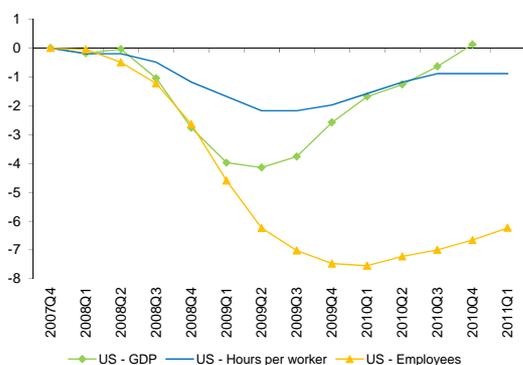
First, unemployment may change less rapidly to changes in GDP growth due to *adjustment taking place in working hours* (at the *intensive margin*). This implies a strong increase in productivity and a small decline in unemployment during the recovery. ⁽⁷⁾ At the early stage of a recession, the hours worked per worker generally fall as firms prefer to cut hours in response to declines in demand rather than laying-off workers, especially if experienced and difficult to replace when the recovery comes.

⁽⁶⁾ For the euro area, 65% of the percentage point changes in unemployment are explained by contemporaneous changes in GDP. In the United States quarterly GDP growth explains only 45% of contemporaneous changes in unemployment.

⁽⁷⁾ Jobs losses in sectors where the low-skilled are highly represented also contributed to the increase in productivity during the crisis.

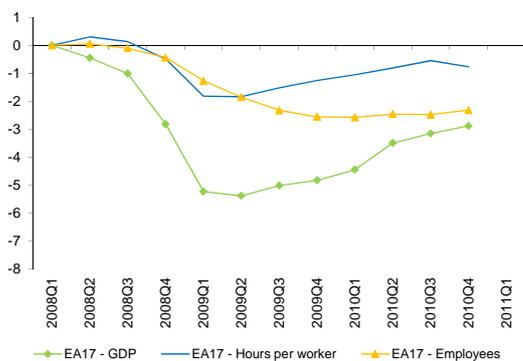
Graph I.1.5 and I.1.6, reporting the evolution of output, number of employees and hours worked per worker since the peak of GDP for the United States and the euro area, show that the cumulative decline in the working hours per employee differed, being substantially more abrupt in the euro area. Consistently, the decline in head-count employment was milder during the recession in the euro area, while in the United States the labour market adjustment took place since the beginning of the crisis largely at the "extensive margin".

Graph I.1.5: **United States – cumulative decline in GDP, number of employees and average hours worked per employee**



Source: Eurostat, U.S. Department of Labor.

Graph I.1.6: **Euro area – cumulative decline in GDP, number of employees and average hours worked per employee**



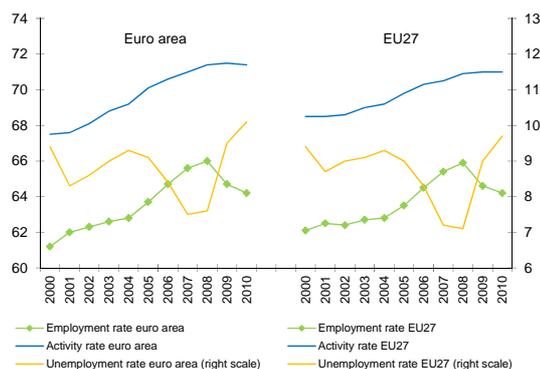
Source: Eurostat, National Accounts.

The second element that may explain the belated response of employment to the output growth in 2010 is *pending uncertainty on the strength and sustainability of the recovery*. Businesses were reluctant to hire in spite of improved expectations

on future economic activity (see Chapter I.4). The fact that employment creation in 2010 took place especially in terms of temporary and part-time jobs confirms the role played by uncertainty, as employers appeared very cautious to increase the rigidity of their costs structures (see Chapter I.2).

The third factor affecting how the unemployment rate picks up changes in the economic activity is the response over the cycle of *labour force participation*. Activity rates in Europe were generally highly resilient. As shown in Graph I.1.7, during 2008-2010, the proportion of the population aged between 15 and 64 in the labour force remained mainly unchanged: an unusual development when compared to the pro-cyclical participation rate of previous recessions. This development reflects a steep increase in female participation (up by 0.5 pps to 64.6% respectively for the EU and the euro area) and a decline for men (by 0.3 and 0.6 pps respectively for the EU and the euro area). While the participation rate of older workers kept rising at the pre-crisis rate, young adults (i.e. both men and women aged between 19 and 24) left the labour force. ⁽⁸⁾

Graph I.1.7: **Employment, unemployment and participation rates in the EU and the euro area**



Source: Eurostat, LFS.

⁽⁸⁾ In the U.S. the participation rate of young adults has increased during the recession, which deviates from the historical trend of a longer time spent in education; the reduced supply of credit to students and the wealth losses of their parents may have induced the young to search for a job to finance their studies (Aaronson et al. 2006).

Box 1.1.1: Changes in female participation rates and the added worker effect

Changes in the labour force participation reflect the decision to work or search versus remaining out of the labour market. In a depressed labour market, individuals may give up searching and finance consumption out of their wealth or by borrowing against future incomes (the "discouraged worker effect"). However, employment uncertainty and credit constraints may play a role in generating short-run participation and employment patterns (e.g. Lundberg, 1985). Thus, a severe labour market slump combined with a reduction in financial wealth and access to credit may result in higher labour supply. If the husband becomes unemployed, the reservation wage of the wife falls, creating the incentive to search. The entry of the non-working spouse in the labour force is needed to smooth out fluctuations of households' consumption. The "added worker effect", i.e. the increase in participation of individuals who are out of the labour force (e.g. young persons, or mothers with children), leads to a rise in overall participation during recessions and a fall during expansions.

The observed increase in female participation rates in the EU since the financial crisis could largely be the result of a strong added worker effect taking place in most EU countries. Table 1 reports the participation rate of married women before and after the crisis compared to the female participation rates for marital status different than married. The table suggests that the participation rate of both groups increased after the crisis but that of married women with children more than other categories; this is also consistent with the US evidence. Between 2007 and 2010 US the participation rate of married women with children increased by 0.4pps, while that of married women remained mainly unchanged.

Table 1. Effect of the crisis on female participation rate

	Married women with children	Other categories of women	Difference
1998-2007	71.8	81.8	10.0
2008-2009	74.5	82.7	8.2
Difference	2.7	0.9	1.8

(1) The table reports the average participation rate for the Member States

Source: Commission services.

Table 2 reports regression based evidence of the effect of male unemployment risks on female participation. The regression takes into account the developments of male unemployment and the peculiarities of the recession, which are captured with a dummy variable taking value 1 after 2007 and zero before. An increase in male unemployment is accompanied by an increase in the participation of married women with children by 0.2 pps; conversely, the participation rate of women with different marital status does not respond to higher risk of unemployment of men. Thus, income and unemployment risk for the main breadwinner appears to be one factor that contributed to increase the female labour supply.

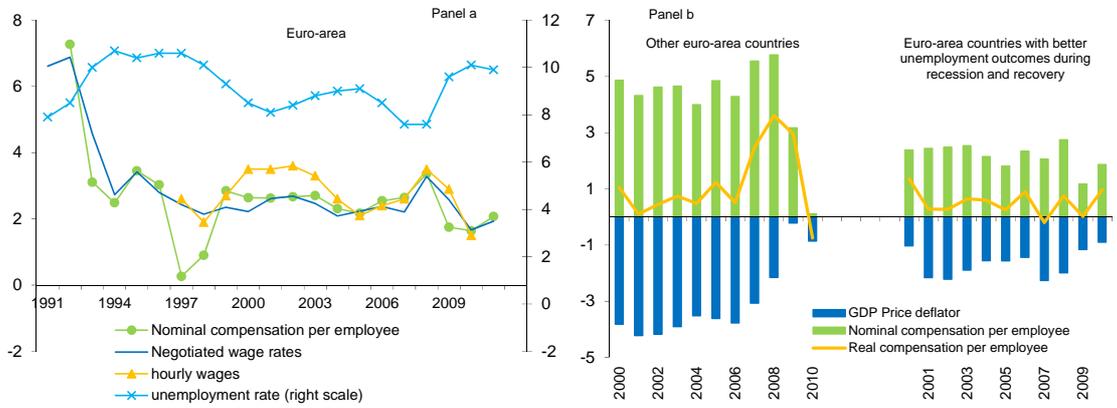
Table 2. Estimate of the effect of male unemployment rate on female participation

Dependent variable	Participation rate of married women with children	Participation rate of other categories of women	Difference between participation rate of married women with children and participation rate of other categories of women
Explanatory variables	(1)	(2)	(3)
Male unemployment rate	0.22 *	0.05	0.19 *
	(0.03)	(0.04)	(0.02)
Dummy for crisis	1.65 *	1.00 *	0.92
	(0.21)	(0.22)	(0.11)
Observations	230	230	230
Number of countries	26	26	26
R- squared	0.97	0.94	0.98

(1) Estimation: Feasible GLS, robust standard error; Fixed effects included; * denotes significance at 1 %

Source: Commission Services.

Graph I.1.8: Wage growth and unemployment in the euro area



(1) Before 2000 hourly labour costs refer to the euro-16 aggregate and compensation per employee to the euro-12 aggregate. 2011 figure for compensation of employee, Commission Spring forecast. Negotiated wages is an indicator constructed by the ECB based on national data; for discussion and caveats see ECB Monthly Bulletin September 2002. 2011 figure for compensation of employee, Commission Spring forecast. For 2011 unemployment rate refers to first quarter.
Source: Ameco and ECB. The group of euro area countries with unemployment outcomes better than the median during both the recession and the recovery include BE, DE, FR, IT, LU, MT, NL, AT and FI.

Hence, the exceptional resilience of EU participation rates is mostly explained by the behaviour of older workers, as a result of past reforms strengthening the incentives to stay in work and as a consequence of reduced pension income from capitalisation-based schemes, and by an increased attachment to the labour market by women, as response to increased income and employment risks of male earners (Box I.1.1).

The resilience of EU activity rates bodes well for the recovery, as high participation rates are key to restore employment rates to pre-crisis levels and ensure progress towards Europe 2020 targets. However, the fact that in a number of EU countries participation even increased during the recession contributed to keep unemployment figures high during the 2010 recovery.

Finally, as discussed in the next sections, the belated response of employment was partly linked to a *delayed adjustment in labour costs* and to a *deterioration in labour market matching*.

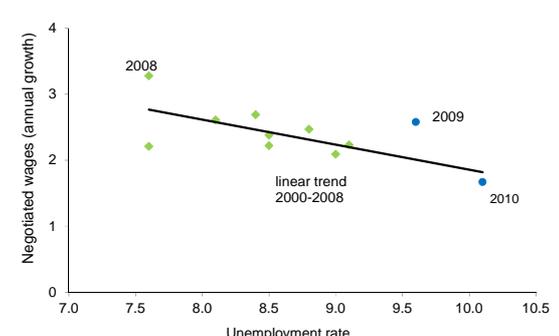
1.4. WAGES AND LABOUR COSTS

Turning to hourly labour costs, during the recession their evolution reflected mainly the adjustment of hours per worker. As the recovery gained momentum and hours increased more than

employment, the growth of the hourly labour costs dropped. In 2010 it was 1.5%, down from the 3% of one year earlier.

For the euro area as a whole, it appears that the labour market weakness has been reflected in collectively agreed wages only in 2010. On the basis of the Phillips curve based on the period 2000-2008, Graph I.1.9 shows that the growth of negotiated wages in 2009 was about 0.5 pps above the rate predicted on the basis of the historical relationship. In contrast, the high unemployment rate had a dampening effect on the negotiated wages in 2010, broadly in line with what predicted on the basis of a Phillips curve-type relation.

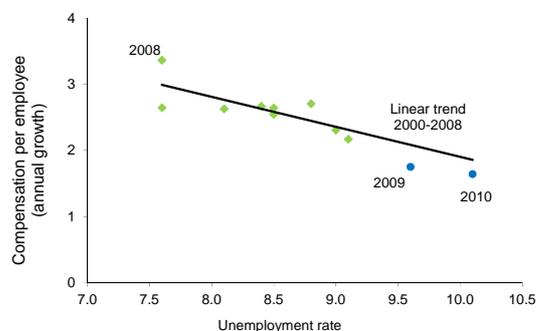
Graph I.1.9: Phillips curve for the euro area 2000-2010: growth of negotiated wages



Source: Commission Services.

The dampening effect of unemployment on wage growth was instead fully reflected already in 2009 when measured in terms of compensation per employee. Graph I.1.10 shows that the growth rate of wages defined in this way was below the Phillips curve line already in 2009. This evidence supports the view that the variable component of wages adjusted faster to labour market slack than the negotiated component.

Graph I.1.10: Phillips curve of the euro area 2000-2010: growth of compensation per employee



Source: Commission Services.

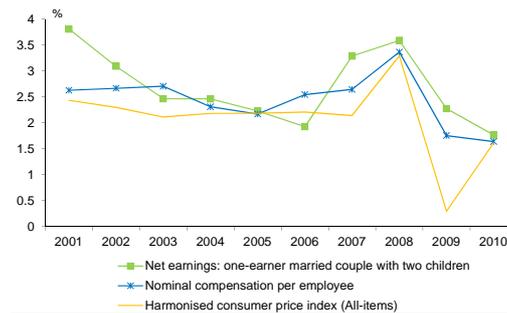
The evolution of compensation per employee in the euro area contrasts with the decline in their level observed in some EU countries (the Baltics, Greece, Malta and Ireland). Apart from being more reactive to a slack labour market, the stronger wage adjustment in these countries reflects a stronger deceleration of the public wage bill.

Regarding euro-area dynamics in real product wages (i.e. nominal compensations per employee deflated with product prices; the definition of real wage relevant for firms' hiring decisions), it appears that they may have somehow contributed to accommodate the slack in the labour market. After growing at 1.3% in 2008, the real compensation per employee based on the GDP deflator decelerated to 0.8% in 2009 and 2010. The massive decline in low skilled employment (accounting for about 2/3 of total net job destruction since 2008) may explain why, in spite of a high and stable unemployment rate, the growth of real wages in 2010 did not adjust any further on aggregate.

More importantly, looking at cross-country patterns, it appears that real wage adjustment is increasingly linked to labour market slack. In fact,

Graph I.1.8 (panel b) shows that until 2009 real wage dynamics were actually stronger in countries with worse unemployment outcomes, and that this pattern is inverting only in 2010.

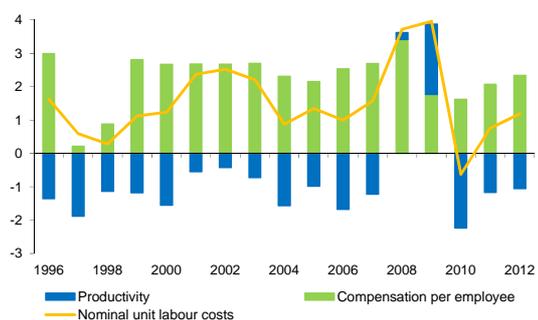
Graph I.1.11: Net earnings and labour costs: euro area



Source: Eurostat.

While the real product wages are relevant for hiring decisions, the developments of the real consumption wages are important for the developments in households' consumption. As shown in Graph I.1.11, the fall of real product wages during the recession has not been accompanied by a reduction in the growth of real take-home pay, which has helped consumption growth to resume as labour market conditions improved.

Graph I.1.12: Compensation per employee and unit labour costs in the euro area



(1) For 2011 and 2012 Commission Spring forecast.

Source: Ameco.

As for developments in productivity and unit labour costs, 2010 marks a revival of labour productivity growth accompanied by a reduction in unit labour costs in the EU and in the euro area, the first since 1996 (Graph I.1.12). These developments compensate for the opposite trend

Table I.1.4: Labour costs by sector

	Compensation per employee			Value added			Total hours worked			Unit Labour Costs		
	2008	2009	2010	2008	2009	2010	2008	2009	2010	2008	2009	2010
Total Economy												
EU27	0.7	-1.1	3.3	1.2	-5.3	3.8	0.9	-3.3	0.3	3.9	4.2	-0.2
Euro-area	3.4	1.8	1.6	3.1	-2.2	2.4	0.7	-3.4	0.4	3.7	4.0	-0.6
US	3.1	2.2	2.9	-0.2	-2.6	2.9	-0.9	-4.9	:	2.4	-0.2	-0.5
Japan	0.0	-3.1	0.8	-1.3	-7.5	3.9	-1.1	-4.8	:	0.9	1.8	-3.6
Canada	2.5	1.7	2.5	1.0	-3.1	3.1	1.0	-3.0	:	3.5	2.6	0.7
Industry (except construction)												
EU27	1.7	-2.3	4.8	-1.0	-13.5	7.7	-0.4	-8.8	-0.2	3.7	5.3	-4.0
Euro-area	3.0	-1.8	3.4	0.1	-11.5	5.9	-0.7	-9.1	-0.4	5.7	8.7	-5.6
US	3.9	4.5	:	-3.6	-5.5	:	-3.0	-12.8	:	4.6	-2.0	-2.9
Manufacturing												
EU27	1.4	-2.4	4.7	-2.6	-14.6	7.5	-0.4	-9.2	-0.2	3.9	6.0	-4.7
Euro-area	3.0	-2.1	3.4	-1.4	-13.4	6.1	-0.7	-9.5	-0.4	6.4	9.2	-5.9
US	3.5	4.6	:	-4.4	-9.2	:	-0.5	-2.0	3.0	4.4	1.4	:
Construction												
EU27	1.3	-1.2	3.8	1.7	-7.0	-1.7	0.6	-7.1	-2.1	2.7	0.5	2.7
Euro-area	5.0	1.5	1.5	3.2	-2.9	-3.7	-1.9	-8.4	-3.2	4.8	2.1	2.1
US	5.4	4.2	:	-5.8	-15.8	:	-0.5	-1.3	1.3	6.2	3.6	:
Wholesale and retail trade												
EU27	0.5	-1.1	3.3	1.6	-6.7	4.0	1.1	-3.0	0.6	0.8	2.5	0.3
Euro-area	2.7	0.8	1.6	3.9	-3.5	2.6	0.9	-2.9	0.3	2.6	5.8	-1.4
US	1.5	1.5	:	-2.3	-2.9	:	0.1	-1.0	0.5	2.5	-2.1	:
Financial intermediation; real estate												
EU27	-2.0	-1.5	3.0	1.5	-2.8	3.0	2.5	-2.5	1.5	-1.2	-0.9	3.2
Euro-area	2.4	0.6	1.5	3.6	0.3	1.5	2.3	-3.5	1.7	3.0	0.8	1.7
US	3.1	1.1	:	1.2	-1.2	:	-0.3	-0.1	1.1	0.4	-4.0	:

(1) Unit Labour Cost data by sector for the EU and EA are own calculations.

Source: Eurostat, Ameco, OECD, Bureau of Labour Statistics.

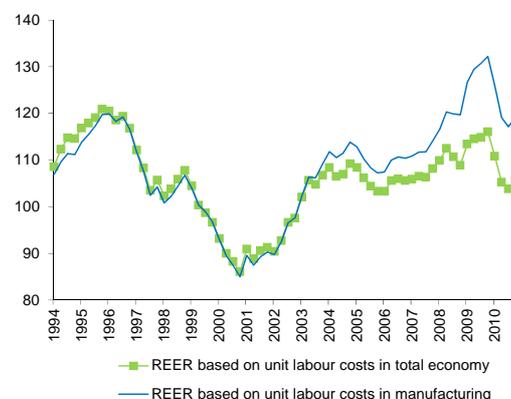
observed in 2008 and 2009, largely caused by widespread labour hoarding.

The fact that the largest increase in compensations per employee was recorded in manufacturing reflects the shift in the composition of employment towards higher wage categories as well as the pick up in the export sector (Table I.1.4).

In spite of the increase in compensation per employee, unit labour costs declined substantially in manufacturing owing to substantial productivity gains, also driven by an increase of value added stronger than that of the total hours worked. In construction, moderate wage developments compared to one year earlier did not match the decline in productivity determined by a limited decline of headcounts relative to output.

For the EU and the euro area, these developments have led to an evolution of relative unit labour costs consistent with a gradual improvement of the competitiveness of export-oriented sectors as also evident from the evolution of the competitiveness indicators (Graph I.1.13). The reduction in the relative wages in non-tradable sectors compared with tradable could also contribute to facilitate the inter-sectoral shift of resources to export industries necessary for countries having to correct current account deficits.

Graph I.1.13: Euro area competitiveness indicators



(1) Real effective exchange rates against 36 trading partners.

Source: Commission Services.

1.5. LABOUR MARKET MATCHING AND LONG-TERM UNEMPLOYMENT

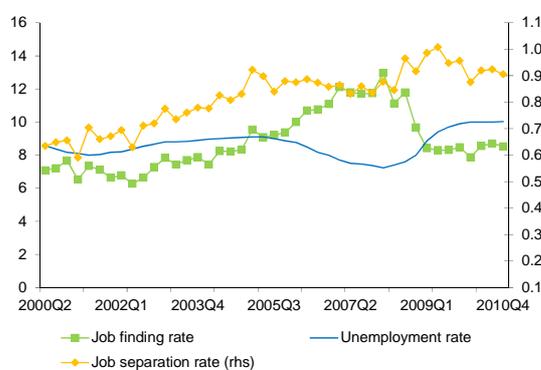
The effect of the financial crisis and of a severe recession has raised concerns about the capacity of the economy to get people back to work and on the risk of hysteresis during the recovery. The risk is that the increase in unemployment becomes entrenched in structural unemployment, i.e. the unemployment that cannot be reduced even after economic activity has returned to pre-recession

levels. High structural unemployment implies that wage pressures can be kept in check only with a substantial slack in the labour market.

In the wake of the weak recovery and of the sectoral adjustment triggered by the crisis, the presence of more pervasive labour market frictions that slow down or prevent the absorption of displaced workers implies higher unemployment duration and higher long-term unemployment.⁽⁹⁾

Graph I.1.14 shows a measure of the job separation and job finding rates based on unemployment duration data.⁽¹⁰⁾ Before the crisis both rates were trending upwards, implying an increase in workers' reallocation (the sum of the job finding and separation rates). With the economy entering into recession, the unemployment rate started to rise due to higher separation rates and lower job finding rates.

Graph I.1.14: Job finding and job separation rates in the euro-area, 2000q2-2010q4



Source: Commission Services based on Eurostat data.

After reaching a peak at the turning point quarter of GDP (2009Q2), the separation rate started to decline, while the job finding rate remained at a persistently low level. Although the flow into the pool of unemployed did not increase any further, it is mostly the low job finding rate that explains a persistently high unemployment rate and longer spells of unemployment.⁽¹¹⁾

⁽⁹⁾ Skills' or geographical mismatches and a decline in the efficiency of recruitment may be a cause of these frictions.

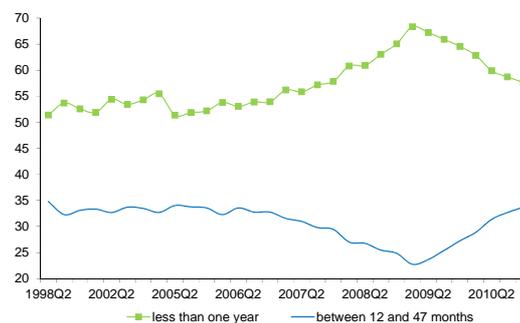
⁽¹⁰⁾ See Arpaia and Curci (2010) for methodology.

⁽¹¹⁾ This is development is observed also for the U.S: the decline in the job finding rate explains more than 95% of the increase in the unemployment since the recession

Compared to the United States, where the job finding rate have trended downward in the last decade (e.g. Tasci and Zaman, 2010), the worsening of employment prospects in the EU coincided with the crisis. Before 2008, the chances of finding a job were gradually improving over time.

As suggested by Graph I.1.15, this led to an increasing share of short-term unemployed, an indication of a more dynamic labour market (unemployment was also falling). At the early stages of the recession, the pick up in the job destruction rate implied a higher share of workers displaced for less than a year; at the turning point of the GDP this share reached 68%. The weak labour market in 2009 and 2010 increased the number of jobless individuals with duration between 12 and 47 months.

Graph I.1.15: Short-term and long-term unemployment in the EU, 1998-2010



(1) Before 2005 annual data; due to data availability for 1998 and 1999, BG, CY, MT and for 1998 AT are not included.

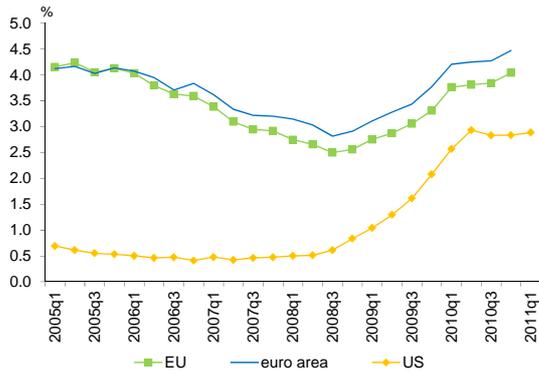
Source: Commission Services, Eurostat.

The increase in the unemployment spells is a distinctive feature of deep recessions (Elsby et al., 2010). Graph I.1.16 reports for the EU and the United States the proportion of the labour force which is jobless for 52 weeks or longer, i.e. the long-term unemployment rate according to the EU statistics. In the EU, the percentage of unemployment spells lasting more than 12 months has increased, although less steeply than in the United States where the share in total unemployment of those jobless for more than a

(Murat Tasci, 2010); the job finding rate has not followed the improvements in the separation rate, which in early 2010 fell to pre-recession levels.

year jumped from 9.5% in the second quarter of 2007 to 31% in the second quarter of 2010. ⁽¹²⁾

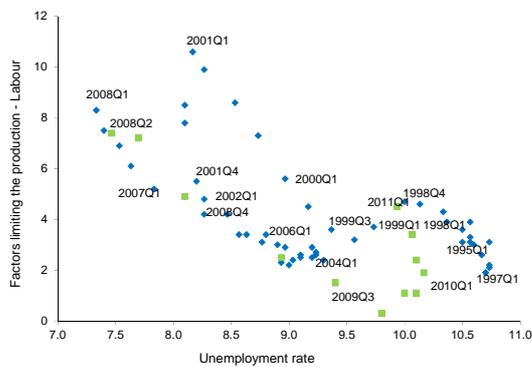
Graph I.1.16: Percentage of the labour force jobless for 1 year or more, 2005Q1-2011Q1



Source: Eurostat and BLS.

The Beveridge curve, the relationship between unemployment and job vacancies, delivers essential information about the labour market tightness and the impact of shocks on the efficiency of labour market matching (Box I.1.2).

Graph I.1.17: Beveridge curve euro-area: 1995q1-2011q1



(1) The survey-based indicator is chosen due to data availability; the correlation between the this indicator and the vacancy rate over the period 2003Q3-2010Q4 is 0.8; seasonally adjusted data.

Source: Commission Services.

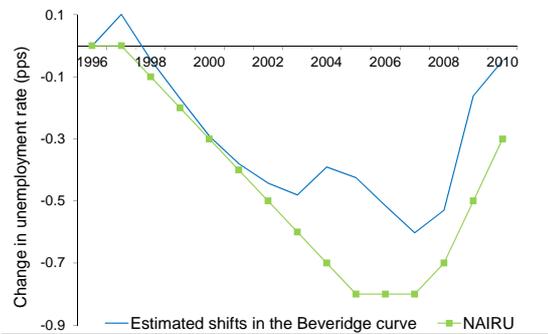
Visual inspection of the data reveals a negative relationship between unemployment and the job

⁽¹²⁾ In the U.S. the share of unemployed for less than 5 weeks has followed a downward trend well before the crisis. The proportion in unemployment of jobless people for more than 26 weeks was 10% in the 1950s and 1960s, it reached 20% between 2000 and 2007, but it rose to 40% in 2009 (see Aaronson et al., 2010)

vacancy rate, with two prominent inward shifts occurring in the late 1990s and mid-2000s, which are indicative of improvements in the efficiency of the matching process (Graph I.1.17).

Until the second half of 2009, the curve did not exhibit a clear shift, which is consistent with a weak demand for labour. However, unemployment hovered around 10% in 2010 while vacancies kept rising, which hints to a possible deterioration of the matching.

Graph I.1.18: Shifts in the euro-area Beveridge curve and NAIRU (cumulated changes since 1996)



Source: Commission services.

Shifts in the Beveridge curve might be temporary or could signal more structural transformations in the labour market. Graph I.1.18 shows that the change in unemployment rate due to the deterioration in the match (i.e. the shift in the location of the curve, see Box I.1.2) and the evolution of the structural unemployment as defined by the NAIRU concept tend to co-move and that this co-movement is particularly evident in recent years.

Between 1996 and 2007 the NAIRU declines and the Beveridge curve shifts leftward (i.e. the unemployment consistent with a fixed vacancy rate falls) and both series points toward declining structural unemployment. After 2008, both the NAIRU and the mismatch-related unemployment shot up considerably. This evidence suggests that, if not reversed, the worsening labour mismatch may imply that a higher share of unemployment becomes structural and that a given reduction of unemployment rates would require a stronger degree of wage adjustment.

Box 1.1.2: The steady-state unemployment rate and the Beveridge curve

Linking the steady-state unemployment rate to the Beveridge curve

The change in unemployment equals the excess of inflows into unemployment over outflows out of unemployment. In symbols,

$$\dot{u}_t = s_t(1 - u_t) - f_t u_t$$

where s_t is the rate of inflows into unemployment, f_t is the rate of unemployment outflows (i.e. the rate at which workers and jobs are matched); $s_t(1 - u_t)$ is the number of people entering into unemployment, while $f_t u_t$ the number of person exiting unemployment. The outflow rate f_t is higher the higher the ratio of vacancies per unemployed (v_t / u_t). This relation is shaped by the *matching function* (e.g. Petrongolo-Pissarides, 2001), which describes the process of allocation of unemployed to jobs. The *steady-state* unemployment rate is the unemployment rate that balances inflows and outflows $u_t^* = \frac{s_t}{s_t + f_t}$. This

expression provides a measure of stable frictionless unemployment. It increases with the job separation rate and when the job finding rate falls. As the value of these rates increases, unemployment converges rapidly to the *steady-state* (Elsby et al., 2009).

The Beveridge curve relates the steady-state unemployment rate to the number of vacancies per unemployed. Assuming a Cobb-Douglas specification for the matching function $f_t = \mu(v_t / u_t)^\alpha$, where μ is

a measure of the efficiency of the matching process, one obtains $u_t^* = \frac{s_t}{s_t + \mu(v_t / u_t)^\alpha}$. For any level of the

matching efficiency μ and of the separation rate s , the Beveridge curve implies a stable and convex negative relationship between the equilibrium unemployment and the vacancy rate. An increase in the efficiency of the matching improves the job finding rate f_t and shifts the Beveridge curve leftward; similarly, a decrease in the job separation rate shifts the curve leftward.

Cyclical and structural changes in the Beveridge curve

The following version of the Beveridge curve has been estimated on euro area aggregate data:

$$u_t = \alpha + \beta_0 u_{t-1} + \beta_1 v_t + \beta_2 v_t^2 + D_t + \varepsilon_t,$$

where u_t in the unemployment rate in year t , v_t is the job vacancy rate, and D_t are dummy variables used to identify shifts in the curve as in Valletta (2005). These shifts embed changing efficiency of the matching process over time. The lagged unemployment rate is introduced to capture the speed of adjustment of unemployment.

The available time series for job vacancy statistics is short as data are available only from 2003Q1. Therefore, a survey based indicator of employers' perceptions on the spare capacity in the labour market is used to obtain the job vacancy rate for previous years. The estimates results are reported in the table below. As expected from the theoretical prediction, the relation between vacancies and unemployment is negative and convex, as revealed by the positive coefficient of the quadratic term. According to the estimates, a 1 percentage point increase in the vacancy rate above the sample mean (1.8%) is associated with a decline in unemployment of 0.7 pps.

Beveridge curve regressions for the euro area: 1996q1-2010q4				
Constant	Lagged unemployment	Job vacancy rate	Job vacancy rate squared	
5.6 *	0.71 *	-2.2 *	0.42 **	

R2=0.98; * denotes significance at 99%; ** denotes significance at 95%

Different factors may have contributed to the increase in the long-term unemployment in the EU:

- the preference of employers to hire people with short spells of unemployment, which became more relevant during the crisis;
- the difficulty of screening a large number of job seekers because of incomplete knowledge about their characteristics (congestion effects)⁽¹³⁾;
- the deterioration of workers' skills during unemployment, implying a lengthening of unemployment spells;
- displaced workers facing financial constraints may have found it difficult to move to locations where jobs are abundant, even when their skills are suitable for any of them;
- worsened mismatch between labour demand and sector-specific skills. This factor could have played a relevant role in the context of the last recession in some countries, in light of the major labour demand drop in construction.

These factors may have contributed, to a different extent in different countries, to a deterioration of matching in the labour market. Some effects could have been played also by policies put in place by governments. Notably, after the recession the coverage and generosity of unemployment benefits was raised in a number of EU countries.⁽¹⁴⁾ By reducing the costs of being unemployed and the intensity of job search, these policies may have contributed to lengthen the duration of unemployment. These measures have been phased out or are in the process of being phased out in most of the countries that put them in place in the aftermath of the financial crisis (see next Chapter of this report). However, during the crisis many Member States have tightened the eligibility conditions to access benefits and the effect on the

⁽¹³⁾ This is also related to an imperfect adjustment of wages and to the limited mobility of workers.

⁽¹⁴⁾ See European Commission (2010) for a review of policy responses to the crisis in the EU Member States. For the U.S. the effect on the unemployment rate of extended duration of unemployment benefits ranges from 0.7 to 1.7 pps; however, the effect is much lower when one takes into account the different eligibility to benefits of displaced workers (Daly et al., 2011).

intensity of job search of eligible unemployed is likely to be limited.

1.6. CONCLUSIONS

In 2010 the EU economy has been heading upward, while the adjustment in the labour market has been lagging behind. The unemployment rate remained stable at the same level of 2009, close to 10%, both in the euro area and the EU. The unemployment rate is however expected to decrease only moderately starting from 2011.

A series of reasons explain the delayed and timid employment recovery.

First, the decline in hours worked per worker during the recession, a key factor in minimising the increase of unemployment, implies that firms have largely responded to the increase in economic activity via an expansion of hours worked. This translated into a strong productivity growth coupled with relatively muted employment dynamics in 2010. Latest quarterly figures indicate that the adjustment in hours worked is levelling off, and the headcount employment started growing again in the first quarter of 2011.

Second, employment recovery may be held back by the remaining uncertainties concerning the sustainability of the economic recovery that may have induced a wait and see attitude on the part of employers.

Third, during the recession the labour supply has behaved unexpectedly; in spite of a large fall in output participation rate has slightly increased. Older workers' participation rose partly because of reforms in retirement age and early retirement schemes, partly because of concerns about pension income following the losses of pension funds during the crisis. The labour supply of women seems to have responded in such a way to compensate higher income and employment risk of men.

Fourth, although there was already evidence of adjustment in nominal compensations to the labour market slack already in 2009, bargained wages started adjusting only in 2010. This suggests that variable pay elements reacted more promptly, while collectively agreed wages are adjusting with

lags. Although real wage dynamics become more muted in the euro area since 2009, it appears that it is only in 2010 that real wage adjustment is becoming relevant in countries with worse unemployment problems.

Fifth, the build-up of long-term unemployment may have influenced the shape and strength of the recovery. The evidence indicates that labour market matching has been worsening in the euro area, as there is more and more unemployment for the same number of vacancies. In spite of a considerable reduction in job separation rates after the recession, job finding rates remained low and unemployment duration has been on the rise. The increase in the frictional unemployment was accompanied by rising estimates of the NAIRU, the concept of structural unemployment consistent with stable prices.

All in all, in spite of the positive effects that the output recovery is gradually having on job creation, there is substantial uncertainty on the speed at which unemployment will go back to pre-crisis levels. This will depend not only on the economic outlook, but also on supportive policy frameworks, notably in terms of unemployment benefits systems and activation policies providing incentives for the unemployed to go back to work, policies and wage setting frameworks supporting wage adjustment, tax systems encouraging job creation, active labour market and training policies facilitating labour market transitions and the return to work for the long-term unemployed.

2. EMPLOYMENT DEVELOPMENTS AT COUNTRY LEVEL

2.1. INTRODUCTION

By the first quarter of 2010, most Member States had emerged from recession. Yet, the recovery in the EU and the euro area remains uneven. A solid rebound in growth, with rates of 3% and higher, was registered only in Germany, Poland and few other export-oriented countries, while growth continued to be negative in Greece, Ireland and Romania.

In spite of growth resuming in most EU countries, only in a minority employment grew. Labour market developments at country level largely followed the multi-speed recovery in place: employment growth was in general stronger in the countries with the best growth performance (Belgium, Germany, France, Luxemburg, Malta, Austria, Hungary, Poland and Sweden). The response of employment to growth was however quite uneven across Member States, in light of differences in economic structure and overall conditions (sectoral composition of employment, corporate profitability,...) and policy settings.

This chapter digs deeper in the main features of employment developments at country level. It provides also an analysis of job market flows and a disaggregated overview of employment dynamics by age, gender, national origin, and type of contract (temporary versus permanent, part-time versus full-time). A special focus analyses the role played by migration in adjusting to unemployment differences across EU countries.

The remainder of this chapter is structured as follows. Section 2.2 describes the recent developments in the unemployment and the labour input. Section 2.3 provides country evidence on the risk of unemployment persistence and the build-up of long-term unemployment. The labour market outcomes for specific employment groups are presented in Section 2.4. Section 2.5 reviews the main policy interventions enacted since 2008 and the reforms announced by the Member States in the context of the EU 2020 National Reform Programmes.

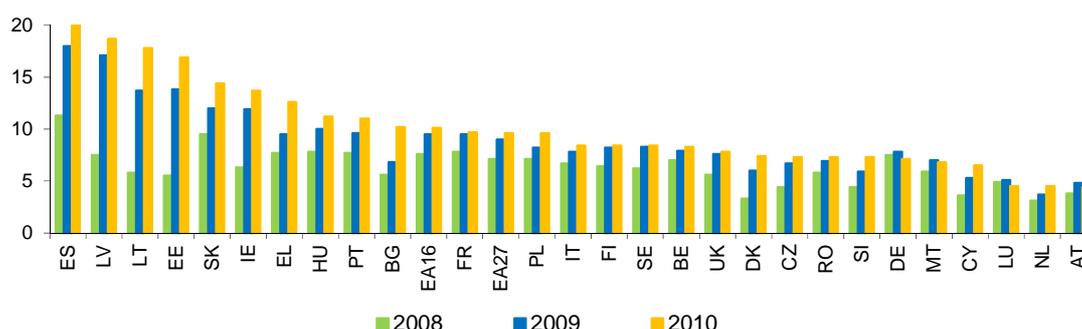
2.2. EMPLOYMENT DEVELOPMENTS AND UNEMPLOYMENT RATES

The evolution of the aggregate unemployment rate conceals fairly wide differences across EU countries. In 2010, the unemployment rate remained persistently above the pre-crisis level in most of Member States, the recovery of output notwithstanding (Graph I.2.1). Unemployment started to fall in the first half of 2010 only in a few countries (Czech Republic, Germany, Belgium and Italy).

In countries hit by the bust of the housing bubbles cycle and by the effects of the financial crisis the unemployment rate kept rising to reach new historical records. In spite of the significant decline in the second half of 2010, the unemployment rate remains among the highest in Latvia, Spain and Estonia.

Overall, unemployment dispersion has increased markedly both within the euro area and the EU. A

Graph I.2.1: Unemployment rates in the EU Member States: 2008-2010 (as % of labour force)

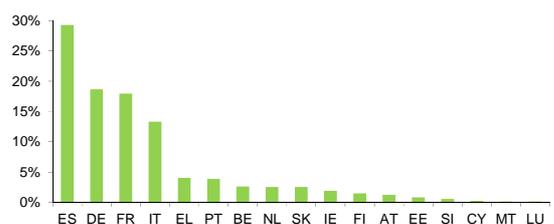


(1) Countries are ranked in descending order of unemployment in 2010.

Source: Eurostat, LFS.

large share of unemployment is concentrated in relatively few countries. Spain alone, with 2 million more unemployed, accounted for respectively half and 1/3 of the increase in total unemployment in the euro area and the EU respectively. Before the recession, Spanish unemployed represented 12% of total EU unemployment, a proportion comparable to its share in total GDP. In 2010, this proportion reached 20% (Graph I.2.2), going well beyond the share of the largest Member States. An opposite evolution has been taking place for Germany, the country with the largest labour force in the EU: the German share in total EU unemployment declined from 20% in 2008 to 12% in 2010.

Graph I.2.2: **Unemployment in the euro area countries: percentage share of total euro area unemployment**



Source: Eurostat, LFS.

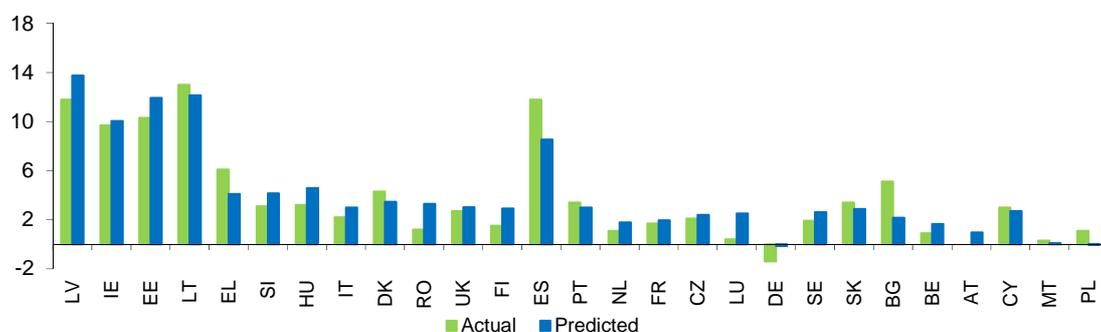
The rising dispersion in unemployment rates is attributable not only to the fact that the crisis hit national economies to a different extent, but also the additional economic, institutional, and policy-related factors that explain a different response of unemployment to economic activity and different risks that unemployment could become entrenched.

The Okun law predicts a relatively stable response of unemployment rates to GDP growth: each additional point of growth is expected to be associated with a less than proportional increase in the unemployment rate, according to most estimates close to 0.3%. Graph I.2.3 reports the observed change in the unemployment rate (2008Q1-2010Q4) and that predicted on the basis of country-level Okun's law estimates.⁽¹⁵⁾ It appears that for most countries the increase in unemployment is lower than predicted by the Okun law. This evidence confirms the relevant role played by adjustment of working hours during the recession in a number of EU countries. However, in a few member States, notably Spain and Bulgaria, unemployment had a strong response to GDP.

These different unemployment responses were to a large extent linked to the interplay between structural and institutional factors. The strong increase of unemployment in countries affected by the bust of housing bubbles was not only due to the severity of the recession but also to the fact that adjustment of working hours and labour hoarding was less present in the shrinking construction sector, while the dismissal of workers with temporary contracts more pervasive.

⁽¹⁵⁾ The Okun's Law has been estimated with OLS and robust variances on a cross-section of the 27 Member States over the period 1983Q1-2008Q1 (2008Q1 is the peak quarter of GDP); the panel is unbalanced due to data availability.

Graph I.2.3: **Changes in the unemployment rate (2008Q1-2010Q4, in pps): actual and Okun's Law prediction**



(1) The bars represent changes in the unemployment rate from 2008Q1 to 2010Q4 (in pps). The predictions come from a panel estimation of the Okun's Law with dependent variable the change in the unemployment rate and the explanatory variables lagged unemployment and current and lagged GDP growth see footnote in the text.
Source: Commission services.

Box 1.2.1: Regional unemployment in Spain and Italy

Highly persistent regional disparities are a distinctive feature of the Italian and the Spanish labour market: regional unemployment disparities within these countries are at least of the same magnitude as that across EU countries. These disparities are also persistent, since the ranking of regions repeats unchanged over time.

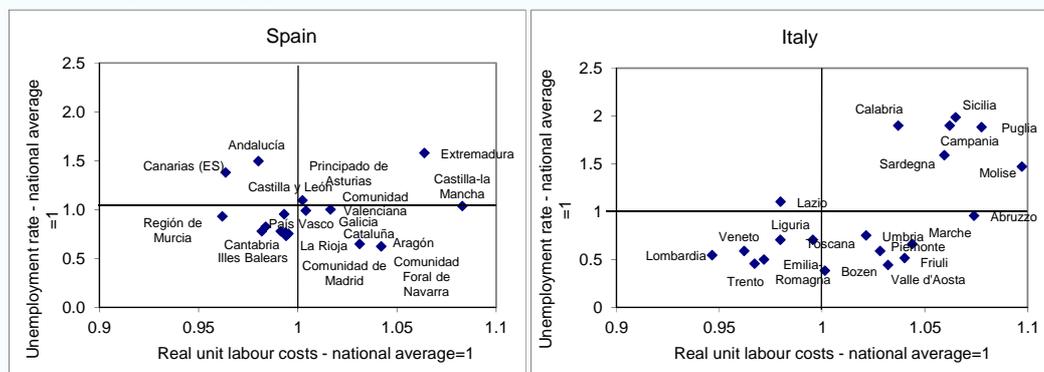
In spite of some improvements in the last decade, joblessness in Italy remains concentrated in the Southern regions, while Northern regions are close to full employment. A similar pattern is observed in Spain, with Southern regions like *Andalusia* and *Extremadura* exhibiting the highest unemployment rates, and other regions like *Navarra*, *La Rioja* and *Aragon* with much lower unemployment. During the boom of the years of the 2000s, spatial disparities declined owing mainly to the fall in the jobless rate in high unemployment regions. However, the rate of employment creation was unsustainable and mainly related to a roaring housing sector. When the burst of the housing bubble hit at the end of 2007, regional differences in unemployment widened considerably, and in *Murcia* and *Castilla la Mancha*, where construction absorbed about 17% of total employment before the crisis, unemployment soared to record high levels.

Large and persistent regional disparities can be explained by structural and institutional features related to i) differences in job creation linked to an unequal distribution in space of dynamic economic activities and declining sectors; ii) differences in the skill-composition of the workforce; iii) agglomeration externalities stemming from the concentration of specialised activities or from market size; iv) cultural, institutional, and policy factors that prevent mobility and the acquisition of the required skills.

Among the latter group of factors a role might be played by public employment. These factors often reinforce each other. For example, a high wage premium for public jobs in Southern regions may induce the young of the South may not only prevent mobility to the North, but would tilt education choices to the public sector, which would in turn raise the dependency on public employment (e.g. Alesina et al., 1999; Dell’Arling et al., 2005).

The structure of collective bargaining can also foster unemployment disparities when the level at which bargaining occurs does not allow to take into account territorial difference in the levels of productivity. It is suggestive a comparison between Spain, where collective bargaining takes place mainly at provincial and industry level, and Italy where bargaining at the sectoral national level prevailed. Graph 1 suggests that in Spain regional disparities in unemployment rates are only weakly associated to differences in the real unit labour costs. This is not the case of Italy, where regions with unemployment rates higher than the national average have also unit labour costs higher than the average. Thus, the predominance of sectoral bargaining at the national level appears to be associated to a larger unemployment dispersion across regions. This phenomenon is not equally evident in Spain, possibly in light of the fact that bargaining is more decentralised, thereby allowing wages to better reflect productivity differentials between different regions.

Graph 1: Regional unemployment and relative unit labour costs

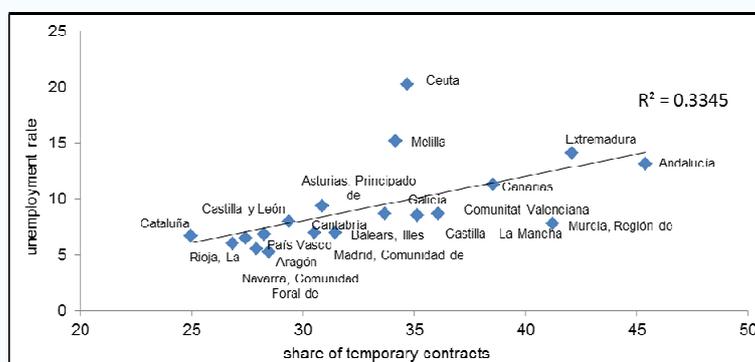


(Continued on the next page)

Box (continued)

What appears to be a distinguishing feature of regional unemployment disparities in Spain is their strong association with the use of temporary contracts. As shown in Graph 2, the larger the share of temporary employment, the higher is unemployment. A possible interpretation of this relation is that when employment is mostly temporary, real wages are less reactive to local unemployment rates. In spite of being decentralised at the provincial level, collective agreements are automatically extended *erga omnes* to all workers in the province and branch of industry to which the agreement refers. As the unionised workers that participate in collective bargaining are mostly permanent workers ("the insiders"), they will hardly accept low real wages in exchange of higher employment opportunities for temporary workers. Thus, stronger real rigidities and higher unemployment is expected in geographical areas with widespread temporary employment.

Graph 2: Regional unemployment and temporary employment in Spain (2005-2009)

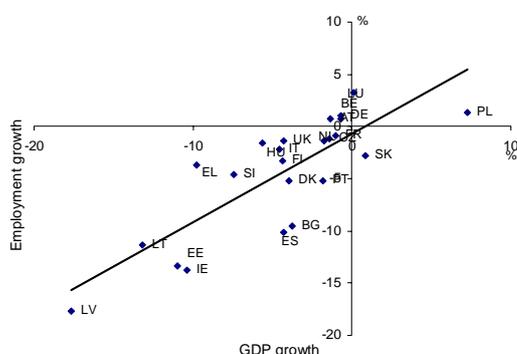


Source: Commission services, Eurostat.

Another factor that explains the heterogeneous unemployment response is the different degree of adjustment in wages. As reported in Chapter III, developments in nominal and real wages varied quite widely across the EU since the recession. Moreover, the adjustment of wages to the labour market slack has been taking place with lags.

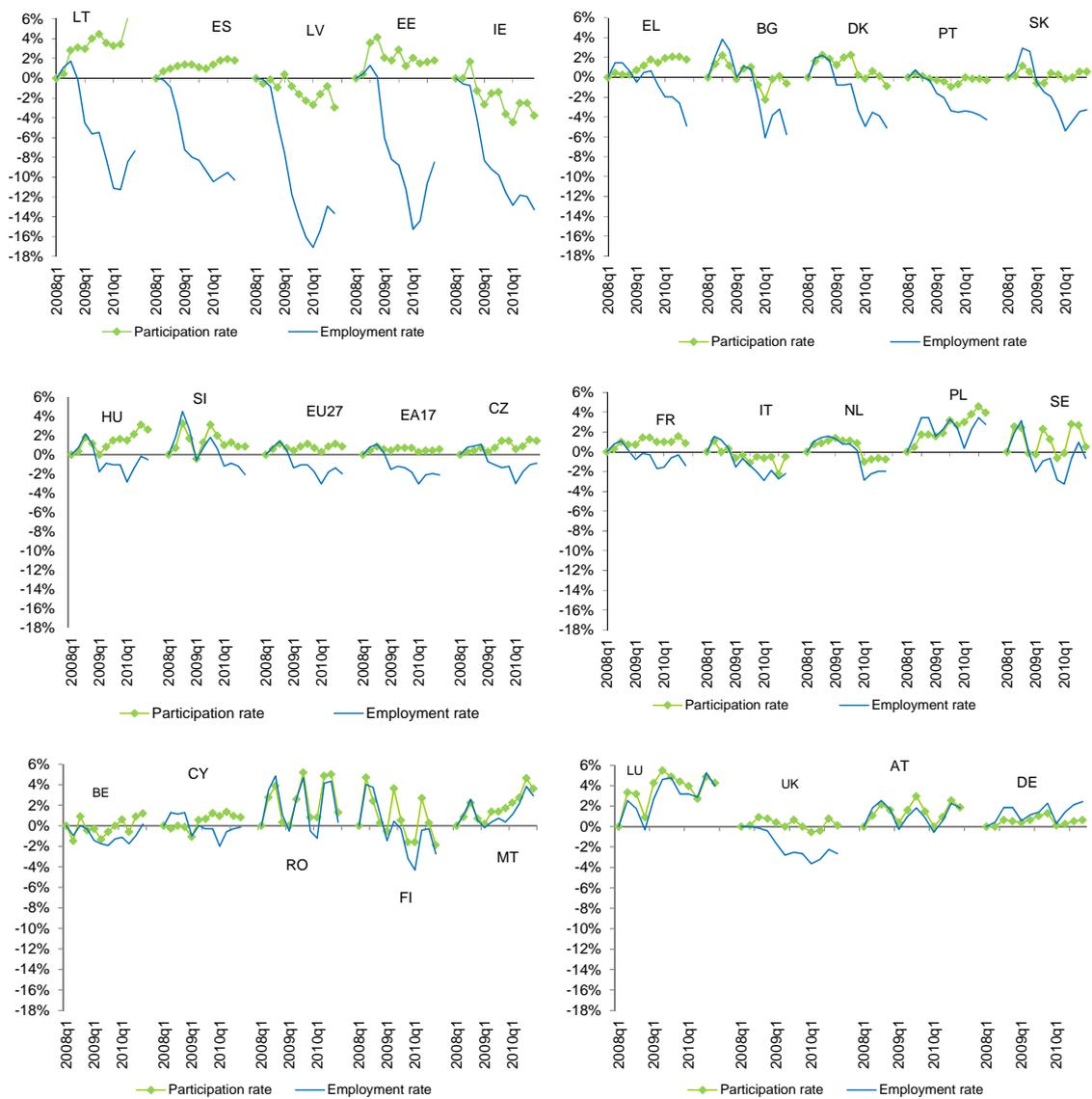
Looking forward, unemployment disparities will be linked to a relevant extent also to the capacity of countries to absorb high unemployment rates and fight structural unemployment. Although structural elements will play a major role in this respect (in particular, unemployment will be harder to absorb where linked to a relevant process of sectoral reallocation), supportive policy frameworks will also play a role. Notably, adequate and effective Active Labour Market Policies would be needed to support the search activities and re-train the long-term unemployed. In some countries, however, an effective strategy for the reduction of unemployment may require more far reaching reforms. Box I.2.1 discusses the cases of Spain and Italy, two countries where unemployment was endemically comparatively high for decades and highly concentrated in a few regions.

Graph I.2.4: GDP and employment growth in the EU (changes over the period 2008Q2-2010Q4)



Source: Eurostat, National Accounts.

Graph I.2.5: Cumulative change in employment and participation rates (2008Q1 to 2010Q4)



(1) Countries are ranked in descending order according to the change in the unemployment rate since 2008Q1.
Source: Eurostat, LFS.

2.3. EMPLOYMENT, PARTICIPATION, HOURS WORKED

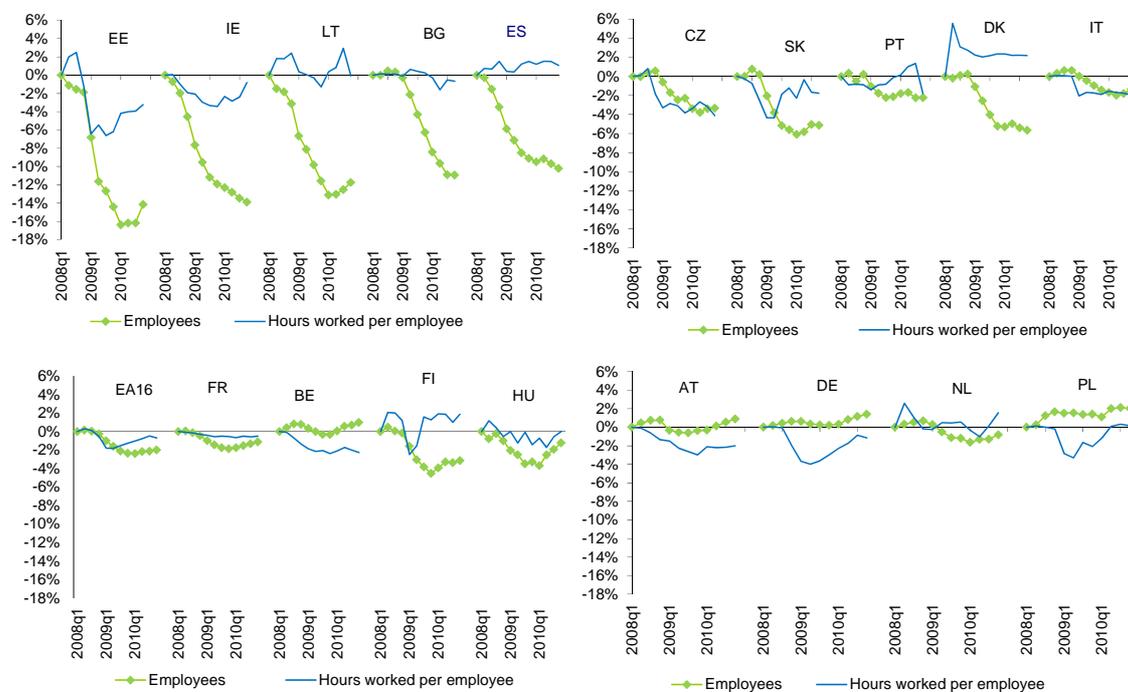
2.3.1. Employment and participation rates

Graph I.2.5 shows the employment and participation rates since 2008Q1. For the EU as a whole, a moderate drop in employment was accompanied by an increase in participation. In almost all countries, the participation rate has remained above or at its pre-crisis level, implying

so far no discouragement of the labour force. As discussed in Chapter I, this outcome could be related to higher unemployment risks of the main earner when a reduction of households' financial wealth or credit constraints limit the possibility of consumption smoothing against a temporary reduction in households' income.

In countries with the highest increase in unemployment, the increase in the number of jobless people was offset by a decline in participation only in Latvia and Ireland.

Graph I.2.6: Change in total hours worked (cumulative changes since 2008Q1)



Source: Eurostat, National accounts.

Conversely, the unemployment rate could have been lower in Spain and Greece had the participation rate not increased. There is also a group of countries where changes in participation and employment since 2008Q1, although smaller, are still substantial. In Denmark, Portugal and Slovakia, the drop in the employment rate was associated with a flat participation rate. In the largest group of countries, the increase in unemployment was more moderate.

Looking forward, past trends may not continue. With unemployment stabilised at high levels in a number of EU countries, jobless people, especially those with low labour market attachment, may give up searching because of deterioration in their job prospects and leave the labour force. Hence, there is the risk that persistent reduction in employment could follow major unemployment surges because of a persistent reduction in participation rates.

2.3.2. The adjustment of hours worked

Graph I.2.6 displays the change in the hours worked per employee and in the number of employees since the onset the crisis. In several

countries, a large part of the reduction in total hours worked during the crisis occurred through a decline in the hours worked per person rather than in headcount employment, in particular in countries where the impact of the crisis was perceived as transitory. Since the recession, only four countries (Belgium, Germany, Austria and Poland) have recorded an increase in the number of employees larger than that in hours worked per employee (in 2010Q4 compared to 2008Q1).

The behaviour of total labour input in Germany is telling of the rapid recovery of its economy, with a rapid return of the average hours to their pre-crisis level and steep increase of employment at the end of 2010. At the current stage of the recovery, the average hours worked are increasing in parallel with the number of total employees with the risk that the labour market becomes potentially tight. This is also the case of Poland, where, however, GDP did not decline during the recession.

2.3.3. Employment developments at sectoral level

At the EU aggregate level, the sectors hit the hardest by the economic downturn were construction, followed by manufacturing (Table I.2.1). The critical employment performance of the construction sector is related first and foremost to the inevitable adjustment after years of unsustainable employment growth. Moreover, the needs of fiscal consolidation and consequent reduction in public works may have also played a role.

Table I.2.1: **Employment growth in different sectors: 2008Q1-2010Q4 (in %)**

Employment (growth)	Total	Agriculture	Industry	Construction	Services
EU27	-2.2	-6.6	-8.7	-10.0	-1.4
EA	-2.3	-4.1	-8.9	-12.9	-1.7
BE	1.2	-1.3	-8.0	0.8	1.6
BG	-9.3	-4.5	-16.3	-26.5	-3.5
CZ	-1.3	-5.0	-7.5	3.0	1.3
DK	-5.4	-6.1	-16.2	-16.6	-6.0
DE	1.3	-1.5	-3.8	1.8	1.8
EE	-14.0	-14.0	-12.3	-48.6	-8.1
IE	-14.5	-27.3	-17.5	-55.0	-10.6
EL	-4.3	0.8	-11.0	-21.3	-3.7
ES	-10.5	-1.8	-21.3	-40.4	-7.7
FR	-0.8	-6.4	-8.1	-2.3	-0.8
IT	-2.3	-2.9	-8.6	-2.8	-2.3
CY	-1.0	7.7	-1.7	-7.3	-3.9
LV	-17.9	2.4	-17.6	-48.5	-16.8
LT	-12.1	-1.2	-23.0	-42.1	-1.6
LU	4.4	8.2	-2.4	1.6	5.1
HU	-2.6	-6.3	-8.8	-5.3	-3.0
MT	1.8	2.5	-5.2	-0.9	3.4
NL	-1.1	-6.6	-5.5	-2.2	-4.3
AT	1.3	-1.8	-5.1	0.8	1.4
PL	2.0	-7.1	-6.2	6.5	6.9
PT	-5.0	-9.7	-6.7	-11.9	-2.9
RO	-3.5	-16.9	-2.7	10.2	5.3
SI	-3.9	-4.9	-15.7	-13.2	1.1
SK	-3.0	-20.8	-12.6	6.3	1.6
FI	-2.6	-5.0	-14.4	-6.1	-1.8
SE	-0.9	0.9	-10.1	4.0	1.7
UK	-1.3	:	:	:	:

Source: Eurostat, quarterly national accounts for most of the countries and national accounts for CY, MT, HU, RO and SE, no employment breakdown by branch available for the UK.

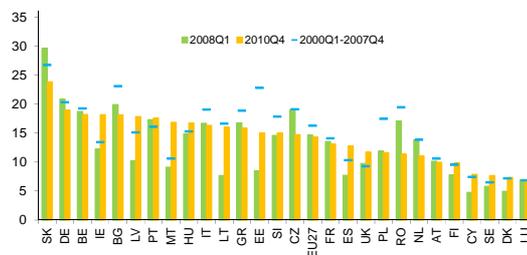
The number of people employed in the construction sector almost halved in the Baltic countries, Spain and Ireland since the onset of the recession. In a number of countries, however, employment in the construction sector rose, in parallel with a decline in industry (among these Belgium, Germany, the Netherlands, Poland and Austria). In 2010, job losses in construction were moderate compared to one year earlier and, at the end of the year, employment losses were relevant in five countries only (Greece, Spain, Italy, Portugal and Slovenia).

In all countries the job losses in services were relatively limited. At the end of 2010, employment in services started to recover from the trough reached in the first half of the year.

2.4. JOB MARKET FLOWS AND LONG-TERM UNEMPLOYMENT

After having temporarily fallen at the early stages of the recession, due to new displaced workers joining the existing stock of unemployed, the proportion of unemployment spells lasting for more than a year has rapidly increased. At the end of 2010, the share of long-term unemployed in the EU reached 42%, 4 pps higher than at the beginning of the crisis, with large differences across country – from 20% in Sweden to 68% in Slovakia. It increased by more than 20 pps in Lithuania, Latvia, Ireland and Spain. The long-term unemployment decreased in few countries, most notably in Slovakia, where, however, the starting level was very high.

Graph I.2.7: **Unemployment duration in months before, during and after the recession**



Source: Eurostat, LFS.

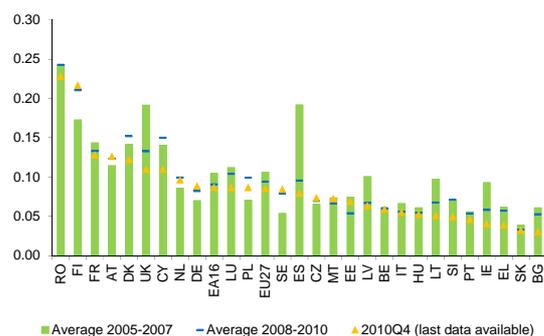
The evidence on unemployment duration might be linked to a series of factors, notably a persistently low rate of job creation.

The analysis of job market flows could provide indications on the source of unemployment fluctuations, notably whether changes in unemployment rates are mostly related to fluctuations in the separation, the job finding rates or both.

As suggested by Graph I.2.8 and by Graph I.2.9, both higher inflow rates into unemployment and lower outflow rates out of unemployment

contributed to the increase in the unemployment during the recession. ⁽¹⁶⁾ The recession was characterised by a substantial increase in the separation rate, in particular in countries hit hard by the bust of the housing bubble and by sharp adjustment of current account.

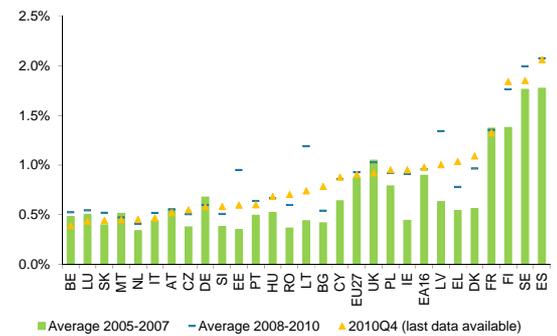
Graph I.2.8: **Job finding rates – the probability of leaving unemployment has fallen during the crisis and remains low**



Source: Commission services' calculations on Eurostat LFS.

as the Netherlands, Finland, and Germany where job finding rates are recovering in 2010.

Graph I.2.9: **Job separation rates – the probability of losing a job remains high in many Member States**



Source: Commission services' calculations on Eurostat LFS.

Separation rates also increased considerably in Denmark, Finland and Bulgaria. In contrast, they remained mainly unchanged in Belgium, Italy, France, Austria and Malta. Germany is the only country where separations declined during the recession. Similarly, the job finding rate declined in several countries, in particular in the Baltics, Ireland, Spain and the UK. The graphs also show that at the end of 2010, the separation rates had fallen in almost all countries, while the job finding rates remained generally below the crisis average.

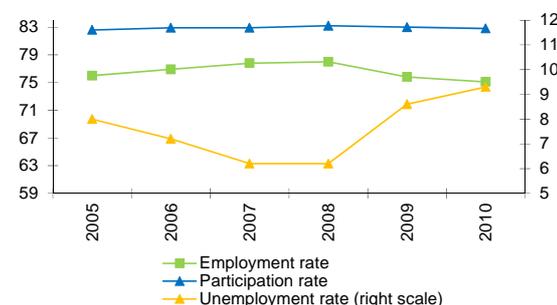
The low probability of exiting from unemployment implies a steady lengthening of the average unemployment duration. The job destruction process is not followed by sufficient job creation and unemployment becomes persistent. This suggests that the sharp rise in unemployment suffered in countries such as Spain and Ireland risks becoming entrenched (higher structural unemployment) without a substantial recovery in job creation. In contrast, the persistency of unemployment is expected to fall in countries such

2.5. LABOUR MARKET STATUS OF DIFFERENT GROUPS

2.5.1. Gender

In 2010, women continued to have a better employment performance than men. Yet, the smaller contraction of employment in male-dominated sectors implied a smaller gap between male and female employment growth (Graphs I.2.10 and I.2.11) than in 2009.

Graph I.2.10: **Male employment, participation and unemployment rates in the EU**



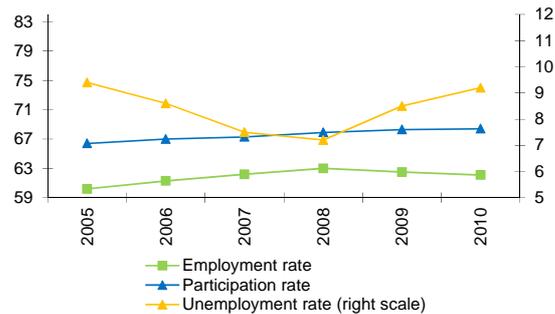
Source: Eurostat LFS, age 20-64.

The gender gap in employment rates narrowed in almost all countries (Table I.2.2), in particular in Bulgaria and Slovakia owing to the strong decline in men's employment rate (-4.7 pps and -2.7 pps respectively); only in four countries (Germany, Finland, Romania, Sweden) men did better than

⁽¹⁶⁾ The graphs show the hazard rates obtained using the methodology developed in Arpaia and Curci (2010); they represent the probability for an employed to enter unemployment and for an unemployed to exit unemployment.

women. In spite of these developments, in some Member States the gender gap in employment rate remains substantial.

Graph I.2.11: Female employment, participation and unemployment rates in the EU



Source: Eurostat, LFS 20-64.

Table I.2.2: Employment rates by country and gender

	Men		Women	
	2010	2009-10	2010	2009-10
MT	77.7	0.8	41.4	1.6
EL	76.2	-2.6	51.7	-1.0
IT	72.8	-1.0	49.5	-0.2
CZ	79.6	-0.6	60.9	-0.5
LU	79.2	0.2	62.0	0.5
RO	70.8	0.1	55.9	-0.4
SK	71.9	-2.7	57.4	-0.8
CY	82.5	-1.0	68.5	0.4
PL	71.6	-1.0	57.7	0.1
EA 17	75.2	-0.7	61.7	-0.4
ES	69.1	-1.9	55.8	-0.5
EU 27	75.1	-0.7	62.1	-0.4
NL	82.8	-2.1	70.8	-1.9
BE	73.5	0.3	61.6	0.6
UK	79.3	-0.3	67.9	-0.3
HU	66.0	-1.0	55.0	0.6
AT	80.2	0.1	69.6	0.2
DE	80.1	0.4	69.6	-0.2
PT	75.4	-1.1	65.6	-0.5
IE	69.4	-2.4	60.4	-1.3
FR	73.8	-0.4	64.9	-0.1
SI	74.0	-1.6	66.5	-1.4
BG	69.1	-4.7	61.7	-2.3
SE	81.7	0.8	75.7	0.0
DK	79.0	-1.8	73.1	-1.7
FI	74.5	-0.2	71.5	-0.9
EE	67.7	-3.3	65.7	-3.1
LV	65.1	-2.3	64.9	-1.9
LT	63.6	-3.3	65.1	-2.4

(1) Countries are ranked in descending order of the gap between male and female employment rates

Source: Eurostat LFS, age 20-64.

Turning to labour force participation rates, in 2010 participation of women increased only slightly, while that of men remained mainly unchanged. The peculiar feature observed during the recession of no withdrawal from the labour market is confirmed also in 2010. As a consequence of the worse employment performance of men during the

recession, the gender gap in unemployment rates has become insignificant.

2.5.2. Age

The employment situation developed more favourably for the old than for the young (Table I.2.3). In 2010, the employment rate of the young and the middle-aged declined by 1 pp and 0.6 pps.

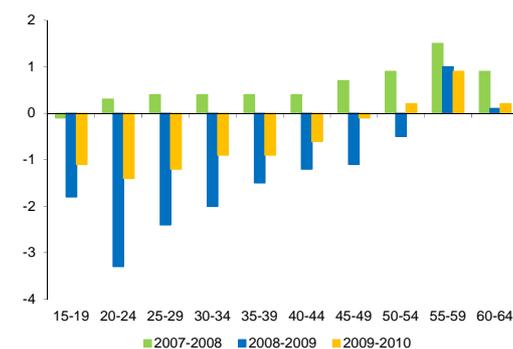
Table I.2.3: Employment, participation and unemployment rates by age EU 27

Age	15-24	25-54	55-64
Employment rate 2010	34.1	77.6	46.3
change 2009-2010	-1.0	-0.6	0.3
Participation rate 2010	43.1	84.9	49.7
change 2009-2010	-0.7	0.0	0.6
Unemployment rate 2010	20.8	8.6	6.9
change 2009-2010	1.0	0.7	0.6

Source: Eurostat LFS.

Conversely, the older workers' employment rate kept rising to reach 46.3%, mainly owing to the more dynamic female component. Although unemployment increased for all age groups, the young saw their rates to reach unprecedented high levels (1 pp both in the EU and the euro area); in 2010 one in five 15- to 24- years old is jobless.

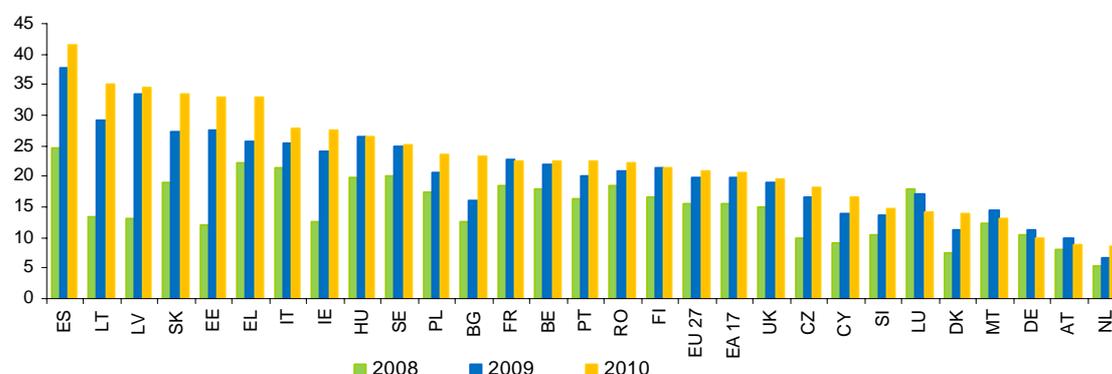
Graph I.2.13: Employment rates changes by age group in the EU



Source: Eurostat LFS.

Graph I.2.13 shows the change in employment rates by age groups before, during and after the crisis. There is a positive relationship between age and the employment rate developments; older cohorts do tend to perform better than younger generations. During the crisis, those aged below 30 were hit harder than other groups. However, a decline of about 1 pp was also observed for those aged between 40 and 49. In 2010, the employment

Graph I.2.12: Youth unemployment rates by country (age 15-24)



(1) Countries sorted by youth unemployment rate in 2010.
Source: Eurostat LFS.

rate continued to decline although by less than the previous year and only for those aged below 45.

The young are a vulnerable group for several reasons. They have little or no work experience, are more likely to be hired with an uncertain contractual relationship and their short-tenure usually implies limited access to unemployment benefits; the transition from education to work is often difficult. All this is reflected in an unemployment rate which has reached 20.8% in the EU, although the increase in 2010 has been more moderate than in 2009 (1 pp compared to 4.3 pps of the year before). The situation differs starkly between countries. Youth unemployment has increased remarkably in countries with the highest increase in aggregate unemployment such as Spain, Ireland, and the Baltics (Graph I.2.12).

Traditionally, the age of entry in the labour force differs strongly between Member States. The employment rate has declined mainly in the countries with high participation rates, such as Denmark, (-4.3%), Ireland (-4.7%) and the Netherlands (-3.8%). As an exception to this pattern, employment rates declined also remarkably in countries such as Spain and Portugal, where respectively more than 60% and 50% of all young in employment had a temporary contract, or in Luxembourg where less than 1/3 of the young are in the labour force.

2.5.3. Education

In 2010, employment rates for different levels of education declined by less than in 2009; the low skilled continued to be hit more than the medium and high skilled, although to a less extent than one year before. The participation rate declined only slightly with no major differences across different skill levels. These patterns resulted in an increase of the unemployment rate larger for the low-skilled (1.3 pps) than for the medium (0.6 pps) and the high-skilled (0.4 pps).

Table I.2.4: Employment, participation and unemployment rates by education EU-27

Education ISCO	Low 1-2	Medium 3-4	High 5-6
Employment rate 2010	53.4	69.9	82.4
change 2009-2010	-1.0	-0.6	-0.6
change 2008-2009	-2.1	-1.5	-1.0
Participation rate 2010	63.1	76.5	87.1
change 2009-2010	-0.2	-0.2	-0.3
change 2008-2009	0.0	-0.1	0.1
Unemployment rate 2010	15.4	8.7	5.4
change 2009-2010	1.3	0.6	0.4
change 2008-2009	3.3	1.9	1.2

Source: Eurostat LFS, age 20-64.

There are remarkable cross-countries differences in the labour market outcomes for the low-skilled (Table I.2.5). Four countries have unemployment rates above 30% (the Baltics and Slovakia). In about six, low-skilled unemployment rates rose faster than the year before, in particular in Lithuania where it jumped by 11 pps to reach almost 40%. On the other hand, in seven countries

the unemployment rate is below 10%. Looking at the EU as a whole, the increase in the low-skilled unemployment rate of 1.3 pps was much lower than the increase of the year before (3.3 pps).

Table I.2.5: Unemployment rates of the low skilled by country

	2010	09-10	08-09		2010	09-10	08-09
LU	5.3	-1.9	1.2	BE	14.7	1.5	1.2
NL	6.2	1.7	0.8	EU 27	15.4	1.3	3.3
RO	6.7	-1.3	0.3	EA 17	16.0	1.4	3.5
CY	7.3	0.9	1.4	DE	16.0	-0.8	0.2
MT	8.0	0.4	0.7	PL	18.2	3.0	2.6
AT	8.2	-1.2	2.2	IE	21.1	4.2	7.6
DK	9.2	1.4	3.7	BG	22.7	7.5	0.9
IT	10.0	0.9	1.1	CZ	24.0	0.7	4.9
UK	12.0	1.0	2.9	HU	24.7	2.1	4.3
PT	12.2	1.6	2.6	ES	26.3	2.8	9.2
EL	12.6	3.2	2	EE	30.2	3.4	16.7
SI	12.6	3.6	2.4	LV	30.2	1.2	15.8
FI	13.0	1.8	2.2	LT	39.8	10.8	16.3
SE	13.5	1.0	3.9	SK	43.0	2.9	1.9
FR	14.6	1.1	2.3				

(1) Countries are ordered in ascending order of the unemployment rate in 2010.

Source: Eurostat LFS, age 20-64.

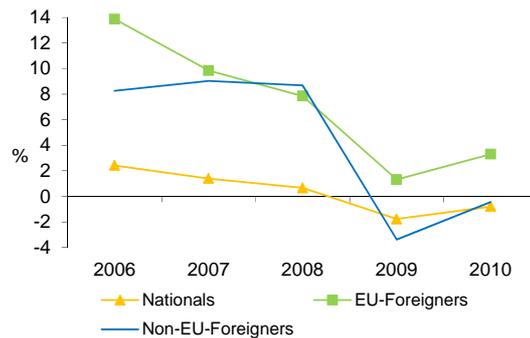
2.5.4. Nationality

In 2009 the employment rate has declined irrespectively of the nationality. However, while employment of nationals (EU citizens working in their home country) and Non-EU-foreigners (who hold no EU citizenship) declined, that of EU-foreigners (EU citizens working in a country other than their home country) continued to grow although by less than previous years (Graph I.2.14). Employment growth of Non-EU-foreigners, which was strong between 2006 and 2008 (more than 8% per year), mainly due to immigration to the EU, immediately turned negative in 2009 and remained so in 2010. The employment adjustment of foreign workers was remarkable in Ireland, where it fell by about 15% against a decline of 2% for the native workers.

In recent years, the European labour markets became more integrated by rising employment of EU-foreigners. Migration to booming countries like Spain and Ireland has been an important labour market development. The question is whether at the current juncture out-migration from countries with high unemployment can help equalising differences across countries in the unemployment rates. Regression based evidence in Box I.2.2, suggests that outward migration can give a small contribution to the labour market

adjustment. Nevertheless, migration flow seems to respond to contemporaneous differences in unemployment across countries, in particular in Ireland and Spain.

Graph I.2.14: Employment growth by nationality EU-27

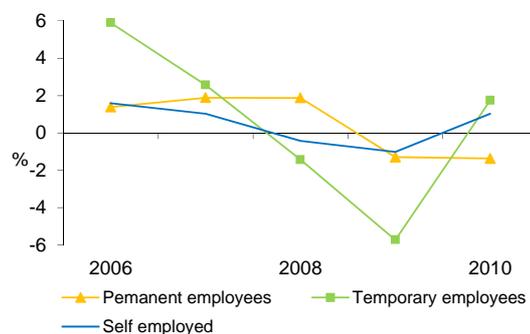


Source: Eurostat LFS, age 15-64.

2.5.5. Contract type

Flexible work contracts (the fixed-term and the self employed) took much of the brunt of the recession (Graph I.2.15). The young were the most involved by the decline in temporary employment (Table I.2.6); about 42% of young employees have a fixed-term contract, up by 1.7 pps compared to last year, against 12% for those aged between 25 and 49 and less than 7% for those in the 50-64 age bracket.

Graph I.2.15: Employment growth by contract type EU-27



Source: Eurostat LFS, age 15-64.

In an uncertain environment, temporary contracts are more rapidly reacting to the recovery in the economic activity. During 2010 self-and fixed-term employment contracts started to grow again. In most countries, people aged below 39 accounts

for a high share of the change in the fixed term contracts in 2010.

Table I.2.6: **Share of temporary employees by age EU-27**

Age	2005-2008	2009	2010
15-24	40.7	40.5	42.2
25-49	12.2	11.6	12.1
50-64	6.7	6.6	6.8

Source: Eurostat LFS.

Table I.2.7: **Distribution of contract types among the employed in % by country**

	Permanent contract		Temporary contract		Self employed	
	2010	chg	2010	chg	2010	chg
EU 27	73.8	-0.5	11.7	0.3	14.5	0.2
EA 17	72.3	-0.4	13.2	0.2	14.5	0.2
LT	88.8	0.9	2.2	0.2	9.1	-1.1
EE	88.7	-1.1	3.4	1.1	7.9	0.0
LU	86.3	0.3	6.5	-0.1	7.2	-0.2
BG	84.6	-0.2	3.9	-0.2	11.5	0.4
LV	84.1	-2.4	6.1	2.2	9.9	0.2
DK	84.0	0.6	7.9	-0.3	8.1	-0.3
UK	81.9	-0.6	5.1	0.4	13.0	0.2
MT	81.5	-1.0	4.8	0.7	13.7	0.4
AT	80.6	-0.5	8.2	0.2	11.3	0.3
BE	80.0	0.2	7.0	-0.1	13.0	-0.2
HU	79.8	-1.0	8.5	1.1	11.7	-0.1
RO	79.7	-1.1	0.8	0.1	19.5	1.1
SK	79.5	-1.5	4.7	1.1	15.8	0.3
IE	77.0	-0.3	7.8	0.7	15.3	-0.4
CZ	76.5	-1.4	6.7	0.4	16.8	0.9
DE	76.4	-0.3	13.1	0.2	10.5	0.1
SE	76.3	-0.6	13.8	0.3	9.8	0.2
FR	75.9	-1.0	13.4	0.5	10.7	0.5
FI	74.3	-0.5	13.4	0.8	12.2	-0.3
SI	73.9	-2.1	14.5	0.6	11.6	1.5
CY	73.2	0.8	11.3	0.3	15.5	-1.1
NL	70.7	-1.4	15.6	0.0	13.8	1.4
IT	67.6	-0.4	9.7	0.2	22.7	0.2
PT	63.7	0.0	18.8	1.0	17.5	-1.0
ES	63.5	0.4	20.8	-0.4	15.7	0.0
EL	62.3	-0.6	8.1	0.2	29.6	0.4
PL	60.4	-0.8	21.2	0.6	18.5	0.2

Source: Own calculation based on Eurostat LFS. Countries are ranked by share of permanent contracts.

Part-time and full-time

Part-time employment has increased since 2002. In 2010 it increased by 1.6% against the overall fall in employment (Table I.2.8). This increase contributed to the decline in the average hours worked; full-time employment on the other hand declined by 1.2%. Women contributed the most to this increase. Since the share of part-time is counter-cyclical, growing faster when unemployment is high and slower when unemployment is low, in 2010 it increased by more than the historical average since 2000; this is also an indication of the uncertainty around the labour market recovery.

Table I.2.8: **Part-time and full-time employment EU 27**

	2009	2010
Full-time employment (Millions)	175.0	173.0
Part-time employment (Millions)	38.8	39.4
Share part-time men	7.4	7.8
Share part-time women	31.0	31.4

Source: Eurostat LFS, age 15-64.

By country, the largest increase in the share of part-time employment was observed in countries with high unemployment, in particular Ireland and, Latvia (+1.3 pps to 21%), which together with Estonia had the highest increase also in 2009.

All, in all, the main stylised facts regarding employment developments since the crisis for different groups can be summarised as follows:

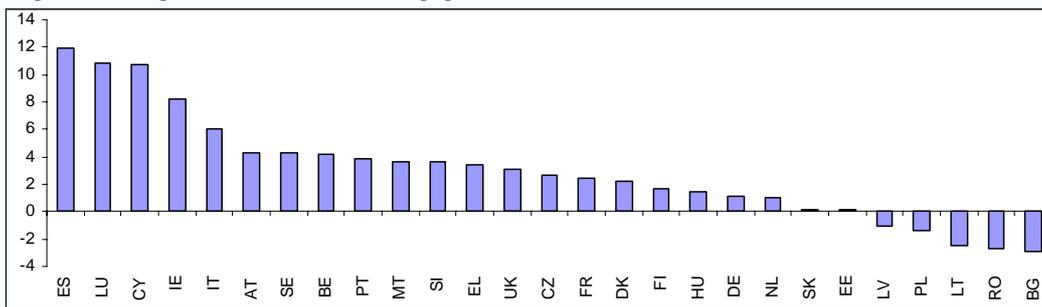
- Female employment rates declined less than male employment;
- The employment rates of the young and middle aged fell comparatively more; those of the old grew;
- Employment rates fell regardless of education, employment rates fell relatively more for the low skilled;
- Compared to 2009, more EU-citizens were employed in countries other than their home country. Employment of nationals and non-EU citizens fell.
- Flexible contractual arrangements were those mostly concerned by labour shedding during the crisis, and were those that grew more during the recovery. Permanent employment continued to fall also during the recovery.

Box 1.2.2: Unemployment and migration

Rising differences in unemployment rates between Member States motivate the question whether migration can help equalising unemployment differences. In the US, migration is a major factor in adjusting to region-specific shocks. In an influential paper Blanchard and Katz (1992) find that in the US shocks to unemployment at state level last about half a decade and are overcome mainly via migration. In Europe labour mobility is lower and unemployment rate differentials persist longer. Despite the relatively low degree of mobility of workers so far, mobility among European countries might play a bigger role in the future due to a number of reasons, including falling transport costs, the elimination of remaining restrictions to within-EU labour mobility, and the fact that a larger stock of EU residents are recent migrants, who typically exhibit a high degree of mobility.

Migration has played a big role in some countries during the 2000s. Net inward migration as a share of the original population between 2000 and 2009 was highest in Spain, with a gain of 12% (Graph 1). Luxembourg and Cyprus follow with gains of about 11% and Ireland with 8%. The biggest population losses from migration were in Bulgaria and Romania which lost around 3% of population each. Losses were also recorded in Lithuania, Latvia and Poland. The financial crisis contributed to contain or even reverse these trends. In Spain, net inward migration declined drastically but remained positive until 2009 (last available data). Net migration flows in Ireland moved from positive to negative territory.

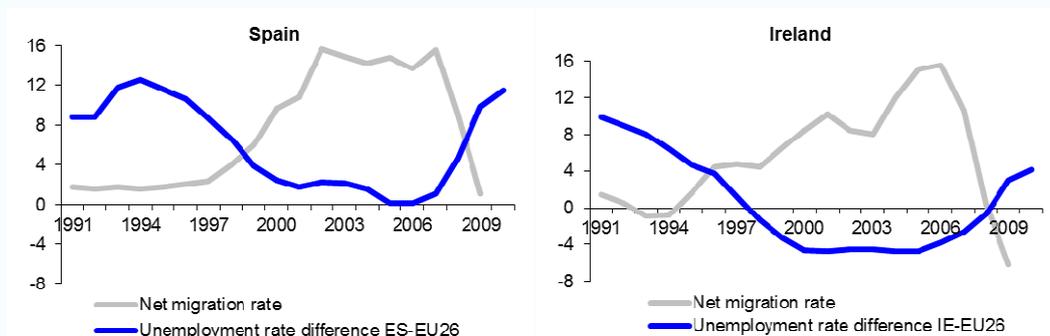
Graph 1: Net Migration 2000-2009 in % of population



Source: Eurostat crude migration rates including corrections.

As expected on the ground of economic theory, the recent developments in Spain and Ireland are linked to widening unemployment rate differences with the remainder of the EU. Graph 2 shows that the negative co-movement in these two countries between net migration (per 1000 inhabitants) and the unemployment gap with the rest of the EU (the population-weighted unemployment rate in the other 26 Member States).

Graph 2: The net migration rate and the unemployment rate difference with the EU-26 for Spain and Ireland



Source: Eurostat and own calculations.

(Continued on the next page)

Box (continued)

In order to investigate to what extent the increased unemployment dispersion within Europe is expected to induce a correction in net migration flows, a migration equation is estimated, and the predictions from the estimated equation used as benchmark. The equation is estimated on an unbalanced panel of 22 EU countries (all EU, with the exception of Bulgaria, Romania, Poland, Estonia and Czech Republic) over the 1991-2009 period. Net migration rates are regressed on the difference in the unemployment rate and in the real wage to the remainder of the EU. Year fixed effects are introduced to control for factors that affect net migration over time. The regression therefore exploits the cross-sectional dimension of the data. The prediction from the estimated equation can be interpreted as the net migration rate prevailing over the long term (i.e. abstracting from short-term adjustment costs) on the basis of the unemployment and the wage gap. The regression results (Table 1) show a relationship between net migration and the unemployment and wage gap which is significant and with the expected sign.

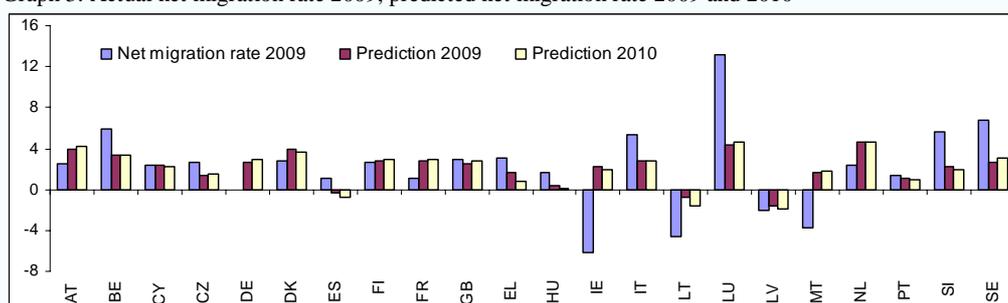
Table 1: Estimation of a migration equation

Dependent variable	Net migration rate	
Explanatory variables	Coefficient	Robust Standard Error
Unemployment rate difference with EU	-0.25 ***	(0.07)
Real wage difference with EU	0.07 ***	(0.02)
Year dummies	not shown	
Observations	340	
Number of countries	22	
R- squared	0.21	

Source: Commission services.

The regression results can be used to predict net migration rates for 2009 and 2010 and compare them to the actual net migration rates in 2009. Graph 3 shows that in Ireland, where net migration turned negative in 2009, the migration equation predicts still positive net migration in 2009 and 2010 albeit with a negative trend. This suggests that the labour market adjustment via net migration in Ireland was relatively quick, and stronger than expected on the basis of economic fundamentals. A relatively fast outward migration adjustment is recorded also for Latvia. Conversely, a comparatively strong inward migration adjustment seems to have taken place in Luxemburg, Belgium, Slovenia and Sweden. In other countries, net migration appears instead to be lagging behind. In Spain net migration was positive in 2009 while the prediction is negative. The net outward migration adjustment is also below what predicted in Greece. In Germany and the Netherlands inward migration is below what expected on the basis of fundamentals.

Graph 3: Actual net migration rate 2009, predicted net migration rate 2009 and 2010



Source: Commission services.

2.6. POLICY DEVELOPMENTS

2.6.1. Labour market reforms after the financial crisis

After the crisis, following the recommendations in the European Economic Recovery Plan of December 2008, reform activity focused on supporting aggregate demand, employment, and income support to reduce social distress caused by the crisis whilst at the same time on easing transition to new jobs.

Measures encouraging flexible working time arrangements have emerged as a new feature of the policy response to contain the impact of the crisis on employment. Short time working schemes were widely used across the EU to maintain existing jobs. Their generosity was scaled up in countries with an already existing scheme, while other countries introduced the scheme from the scratch. Apart from short time working schemes, employment and labour demand was supported by significant reductions of employers' social security contributions and labour income taxation.

Unemployment benefit systems played an essential role in income stabilisation. A majority of measures expanded the coverage, notably to workers with shorter employment histories and young, often on a permanent basis. Some countries, in particular those with less generous benefits, provided additional generosity for example by extending benefit duration and raising the replacement rate. A majority of EU countries also beefed up social assistance and other income support mechanisms, normally on a temporary basis.

Activation and assistance policies were reinforced in many countries to provide effective services to an increasing number of the unemployed and prevent immediate job losses from turning into long-term unemployment. The focus was on enhancing employability of those hit by the crisis, by improving the job placement mechanism and expanding training and lifelong learning opportunities. Employment of the most difficult to employ was widely supported by scaled-up existing or newly introduced wage and employment subsidies as well as job creation schemes.

A few countries revised the legislation on hiring and firing to reduce labour market segmentation and allow for smooth labour reallocation from contracting to expanding sectors.

2.6.2. Labour market reforms in 2010

As growth resumed, the European Council of March 2010 called for phasing-out the temporary crisis-related measures and putting in place a credible long-term structural reform agenda to raise growth and employment potential. The policies put in place in EU countries in 2010 broadly reflect this shift in policy priorities.

While policies to sustain labour supply and facilitate transitions to work remained a focal strategy to fight structural unemployment, new measures were introduced to support labour market dynamics and reduce labour market segmentation. Short-time working schemes remained in use in 2010 in several countries, although companies could normally apply to benefit from these schemes at latest until the end of 2010. In contrast to the crisis period, hardly any measures strengthened the income stabilisation role of unemployment benefit systems in 2010. Only few measures adapted the benefit system to the revival of economic activity.

Long-term structural reforms came to the forefront and reform priorities shifted towards those measures that facilitate labour reallocation and reduce labour market segmentation (measures to reduce hiring and firing costs).

Activation and assistance policies

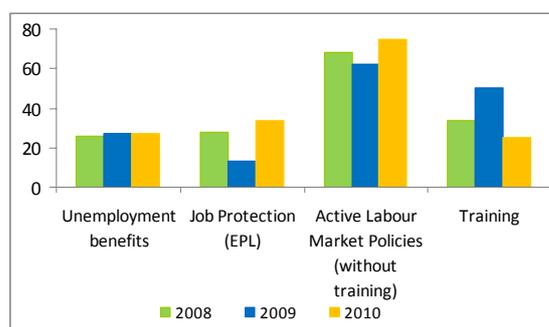
Activation and assistance policies, often built upon reform strategies set in place before the crisis, remained one of the most widely used instruments to fight unemployment to become entrenched (Graph I.2.16). The institutional network was adapted to provide more efficient services, by reorganising public employment services (Lithuania, Luxembourg, Ireland), decentralising activation (Lithuania, Luxembourg) and increasing staff capacity (Spain, Sweden). New strategies were devised to improve matching and provide high quality assistance and activation, in particular by improving assessment of services and tailoring them to specific clients (e.g. the young, the older and long-term unemployed).

For the most difficult to employ, transition to work was supported by newly introduced or scaled-up wage and employment subsidies, often targeted to non-profit organisations (e.g. Austria, Lithuania). Conversely, direct job creation schemes became less important. Targeted measures were also introduced to keep older persons either employed, by supporting their transition within a firm to jobs with lighter duties, or attached to the labour market (Belgium, Luxembourg). In addition, re-integration measures were devised for those who lost their jobs in a specific sector such as the construction sector and the financial sector (Ireland, Luxembourg). Finally, measures were taken to bring the disabled back work (e.g. the Netherlands, Sweden).

Unemployment benefits

The simple count of reforms in the unemployment benefit system reveals that roughly the same number of measures as in 2008 and 2009 were taken in 2010 (Graph I.2.16). Reforms were aimed at encouraging the unemployed to take up work without losing unemployment benefits. Such measures were often targeted to long-term unemployed and the unemployed who either set up their own business with low income or take up part-time jobs (Slovakia, Portugal, Germany, Slovenia).

Graph I.2.16: Number of reforms taken since the outbreak of the crisis



(1) LABREF is compiled in DGEFIN on the basis of National sources, EIRO, OECD reports, Employment Observatory etc. For the latest years the database is in the process of being validated by the members of the Economic Policy Committee and may not be exhaustive. Reforms in the area of ALMPs include reforms of direct job creation and employment subsidies, public employment services and other schemes.

Source: Commission services, LABREF database.

A relatively few countries adapted unemployment benefit systems to provide either additional income stabilisation or to adjust their generosity to circumstances of economic recovery. Incentive-friendly reforms took place in countries with the most generous unemployment benefits (e.g. Denmark, Portugal). Denmark substantially cut its generosity by introducing a cap on the maximum period available for drawing benefits, thus effectively halving the maximum benefit duration from 4 to 2 years; the eligibility criteria to re-qualify for benefits became stricter, while the base to calculate the amount of benefits was made less generous.

Conversely, a few measures were taken to make unemployment benefit system more generous and inclusive in some countries with less generous initial position (Slovenia, Italy). A few measures also tightened the conditions for receiving and keeping benefits.

Job protection

New measures to reform job protection were taken in some countries in 2010, notably in those with the most rigid employment protection in the EU (e.g. Spain, Portugal and Greece) – Graph I.2.16.

Under the pressure of mass unemployment and a highly segmented labour market, a relevant reform of the employment protection was initiated in Spain. The groups that can be hired with open-ended contracts with reduced severance payments (33 rather than 45 days of years of service) were expanded to include almost all unemployed and vulnerable groups such as women returning to the labour market after child birth or longer period of inactivity and temporary workers. The causes for justified dismissals were also clarified and broadened allowing the economic, technical and organisational reasons, among the admissible cases for dismissal.

Steps to deregulate further temporary contracts injected an additional flexibility to the labour market, in particular as regards work provided by temporary work agencies. Typical measures broadened the scope of activity of temporary agencies to include the public sector (Greece, Spain) and loosened restrictions on the extension of fixed term contracts (Finland, the Netherlands).

Training and life-long learning

Enhancing employability of workforce to reduce skills mismatches and skills shortages remained relevant for supporting transitions to work, though intensity of these reforms declined (Graph I.2.16). A majority of measures expanded training opportunities, usually to certain target groups such as the unemployed and young, while some measures encouraged taking up training with financial incentives.

Conversely, to reduce costs, some countries restricted financing of training, by making it conditional upon subsequent employment or taking an exam. Some measures also aimed at up-skilling employees, by strengthening their rights to training at work and taking leave from work for training purposes.

Hiring tax incentives, child care facilities

A number of measures aimed at making hiring for employers and work for employees more attractive. Tax incentives were usually conditional upon new hires of specific and less employable demographic groups (e.g. Italy, Greece, Spain and Portugal). In addition, they were widely used to complement job assistance and activation strategies with the aim to facilitate transition of the unemployed back to work. At the same time, a variety of measures addressed bottlenecks for women to participate on the labour market, by providing tax incentives on income from work and making childcare facilities more available.

2.6.3. Policy priorities looking forward

The 2011 Annual Growth Survey outlines an integrated approach to economic reforms that would accompany the recovery in the short term and ensure a full use of the labour potential. The main priority concerning labour market are:

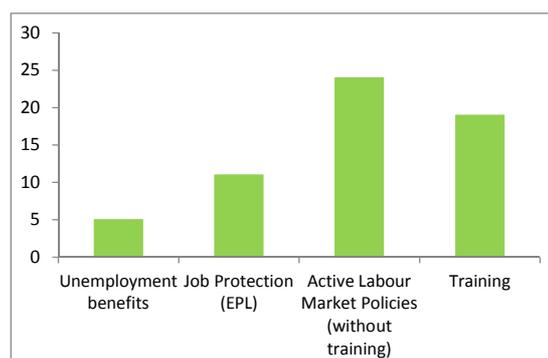
- Employment friendly tax and benefit systems (e.g. shift of taxes away from labour, incentives-supporting tax and benefit systems, flexible work arrangements and childcare facilities that support labour market participation of second earners, reduction of undeclared labour);

- pension reforms (retirement age, early retirement) and life long learning strategies strengthening incentives and potential for older workers to stay active;
- unemployment benefit systems and activation policies that reward the unemployed going back to work (benefit design tackling benefit dependence and unemployment traps; better adapting unemployment benefit systems to the cycle);
- reforms in labour legislation aimed at better balancing security and flexibility.

Member States have announced in their 2011 National Reform Programmes (NRPs) measures that are broadly consistent with the priorities set out in the Annual Growth Survey.

On the basis of the NRPs (Graph I.2.17), it appears that assistance and activation policies will remain a widely used instrument to fight long-term unemployment. Labour market reforms in many Member States will focus on bringing the unemployed back to work and avoid the build up of long-term unemployment.

Graph I.2.17: Number of countries announcing reforms



Source: Commission services, National Reform Programmes. Ireland, Greece and Portugal are not taken into account.

Measures that improve the organisation of placement and matching services have been announced in several countries (e.g. Spain, Italy, Germany, Luxembourg and Romania). Measures will be tailored to specific demographic groups such as young, women, older, migrants and long-term unemployed. In this context policy interventions will aim at enhancing occupational

and regional mobility (e.g. Finland, Belgium) and promoting with wage subsidies employment of specific groups (e.g. Slovakia, Cyprus, Finland, Slovenia, Bulgaria, Lithuania). In addition, effort to integrate persons with disabilities and long-term illness will continue (e.g. the Netherlands, Sweden).

To complement assistance and activation policies most of Member States are introducing measures to enhance the employability of workers and facilitate transition from school to work. Announced measures target young, older, migrants and unemployed, and include wider training and lifelong learning opportunities, as well as better quality of education.

Reforms of the employment protection legislation will continue in the future with the aim to fight labour market segmentation and make labour markets more dynamic. Several countries announced measures that aim at loosening employment protection legislation for permanent contracts (e.g. Spain, Slovenia, Slovakia, Italy, Lithuania, Czech Republic, Poland, Bulgaria), also in view to align it with protection of temporary contracts, and further deregulating temporary contracts.

Conversely, unemployment benefit systems will receive relatively little attention in the years ahead. To balance work and family life, reforms will continue to make child care facilities more accessible and effective. On the agenda of some countries will also be fight against illegal work.

2.7. CONCLUSIONS

In 2010, the EU labour market has started to move forward; yet, improvements have been uneven. Some countries are moving slowly to pre-crisis employment levels amid a modest pick up in the economic activity. In countries constrained in their policy manoeuvre by external and fiscal imbalances, unemployment is rapidly increasing. For others, the initial conditions prior to the crisis are influencing the nature of the labour market adjustment at the early stages of the recovery.

For example, a very high weight of employment in construction in Spain turned out to be a serious constrain to a rapid employment recovery after the

bust of the housing bubble; in addition, the duality of its labour market entailed substantial job losses among workers with fixed term contracts. Conversely, Germany entered into the crisis with the allocation of resources not distorted towards non-tradable sectors, no much indebted households and firms in a healthy financial position. The fiscal space allowed implementing a policy response that contributed to minimise the impact of the crisis. These factors contributed to a rapid economic recovery and even accompanied a small decline of unemployment.

The diversity in the labour market response across countries concerns also the composition of unemployment. The job separation rate is in many countries back to the level prevailing before the crisis. In contrast, the hiring patterns differ quite substantially across countries. In some, the hiring rate is back or even higher than the pre-crisis levels; in other it remains very low. Where the job finding rate is sluggish, the spells of unemployment are increasing. These developments are posing different challenges for policies.

The Annual Growth Survey outlined priority actions to strengthen recovery in the short-term and Member States presented their reform strategies in the National Reform programmes. Reforms will have to support reallocation across firms and sectors, inter-alia with appropriate wage policies. In the context of extremely constrained public finances in many countries, labour market policies will have to target the most vulnerable groups.

3. WAGE DEVELOPMENTS AT COUNTRY LEVEL

3.1. INTRODUCTION

Compensation per employee in the EU grew at a moderate rate in 2010, reflecting the weak labour market conditions. Developments were very heterogeneous across Member States. In the non-euro area countries, wages grew at a robust rate in Bulgaria, Poland and the United Kingdom and continued to decline, though at a much slower rate, in Latvia and Lithuania. In the euro area, compensation per employee remained close to the record low of 2009, but it varied considerably across euro area members.

Heterogeneous developments in the growth rate in compensation per employee are the result of different conditions and exposures to the recession, need of rebalancing in some countries and underlying labour market institutions. This led to different speeds of adjustment in wages.

Real compensation per employee declined in about half of the EU Member States in 2010. The average growth was much below that of productivity, leading to a decline in the wage share. This represents a correction to the developments occurred in 2009, when real wages continued increasing while productivity was declining sharply. While in some countries the variation in real wage helps absorbing unemployment, in other countries real wage growth appears not in line with the need to reduce unemployment.

The growth rate in compensation per employee was on average stronger in the industry excluding construction sector. It was followed by the trade transport and communication (which only halved that of industry) construction, and finance and business services sectors. On aggregate, the growth rate in compensation per employee increased at a higher rate in the tradable than non-tradable sectors.

Compensation per employee in the public sector was on average lower than in private sector. A number of governments imposed wage cuts and wage freezes in the public sector with a view to reduce their fiscal deficits. This led to a reduction in compensation per employee in the public sector in Ireland, Hungary, Spain and Estonia and a sharp deceleration in Italy and Portugal.

The growth rate in nominal unit labour costs registered a record low in 2010. Nominal unit labour costs declined both in the euro area and the EU. This occurred for the first time since 1996. The negative growth rate in 2010 follows the record highs registered in 2009, when productivity per person employed declined sharply in consequence of the economic downturn and the reduction in the number of hours worked per employee. In this year most EU Member States experienced a reduction in the number of hours worked per employee. The number of hours worked per employee increased again in 2010 with the economic recovery, which explains a large part of the pick up in productivity and the deceleration or reduction in unemployment.

As a result of the dynamics in unit labour costs, cost competitiveness relative to a group of 35 industrialised nations improved in most of the EU Member States. There were also some signs of adjustment within the EU. Real effective exchange rates (REERs) appreciated in countries with depreciated REERs and depreciated in countries with appreciated REERs.

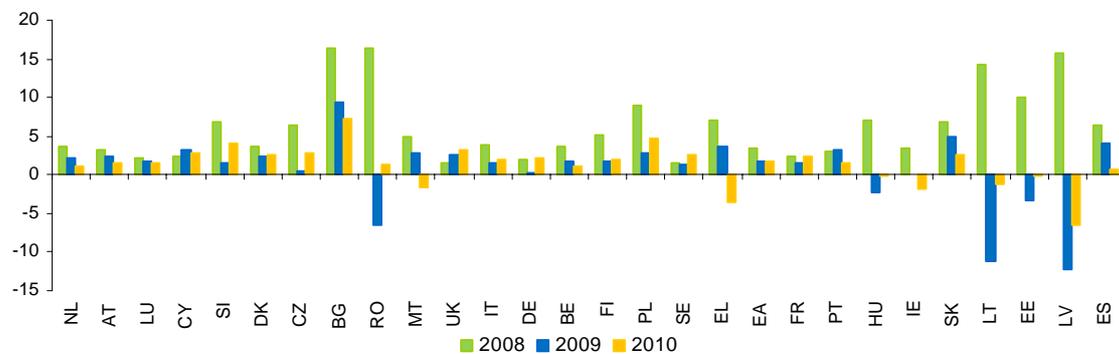
The remainder of this chapter is organised as follows. The next section describes the main trends in wage developments and assesses them against the need of adjustment in unemployment. Section 3.3 summarises developments in unit labour costs. Section 3.4 looks at the evolution of the REERs and external adjustment. Section 3.5 describes the main policy developments, including collective bargaining, minimum wage and tax wedge. Section 3.6 concludes.

3.2. TRENDS IN WAGES

Compensation per employee in the EU grew at a moderate rate in 2010, reflecting the weak labour market conditions. The aggregate picture masks very uneven developments in compensation per employee across Member States. In the non-euro area countries, wages grew at a robust rate in Bulgaria, Poland and the United Kingdom and continued to decline, though at a much slower rate, in Latvia Lithuania and Hungary (see Graph I.3.1).

In the euro area, the growth rate in compensation per employee was moderate, close to the record

Graph I.3.1: Nominal compensation per employee, y-o-y % change



Note: Romania is off-scale; the actual value of the growth rate in compensation per employee in 2008 was 31.9%. Countries are displayed in ascending order of the unemployment rate in 2009.
Source: AMECO.

low registered in 2009. Compensation per employee declined in Greece, Ireland, Malta and Estonia while Spain recorded a growth rate below 1%. By contrast, Slovakia, Cyprus and Slovenia recorded a growth rate in the compensation per employee well above the euro area average. These uneven developments reflect different exposures to the recession, need of rebalancing in some countries and underlying labour market institutions.

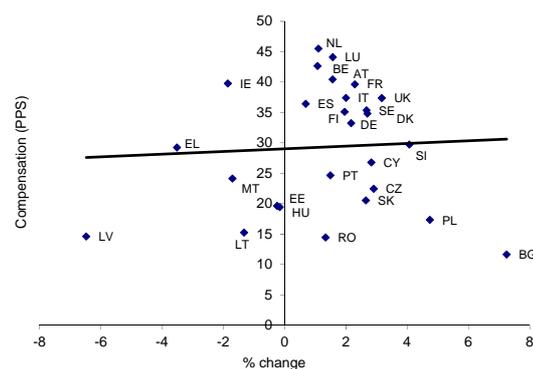
The deceleration in the growth rate in compensation per employee led to a decline in the real compensation in about half of the Member States, which is in line with the need to absorb the high unemployment. These results suggest signs of adjustment in 2010. Real wages on average adjusted more in countries with higher unemployment, which contrasts with developments in 2009.

Developments across countries are, however, only to some extent consistent with the need to reduce unemployment and unemployment disparities among the Member States. In the euro area, although improvements were registered in comparison with 2009, wage developments are only moderately consistent with the need to absorb unemployment and reduce unemployment divergences. Adjustment is expected to continue in 2011 both in the euro area and the EU. In 2010, productivity was at the same level as in 2008 but real wages were 2 pps higher.

The deceleration in compensation and the rebound in productivity led to a decline in nominal unit labour costs. This helped EU Member States to

regain competitiveness in relation to a group of 35 industrialised countries. Similarly, within the euro area there were some signs of adjustment. The correlation between variations in REERs and the current account is negative, suggesting that in general REERs are helping the external rebalancing of the euro area economies. The adjustment in current account balance was stronger in 2009. But some signs of convergence continued in 2010.

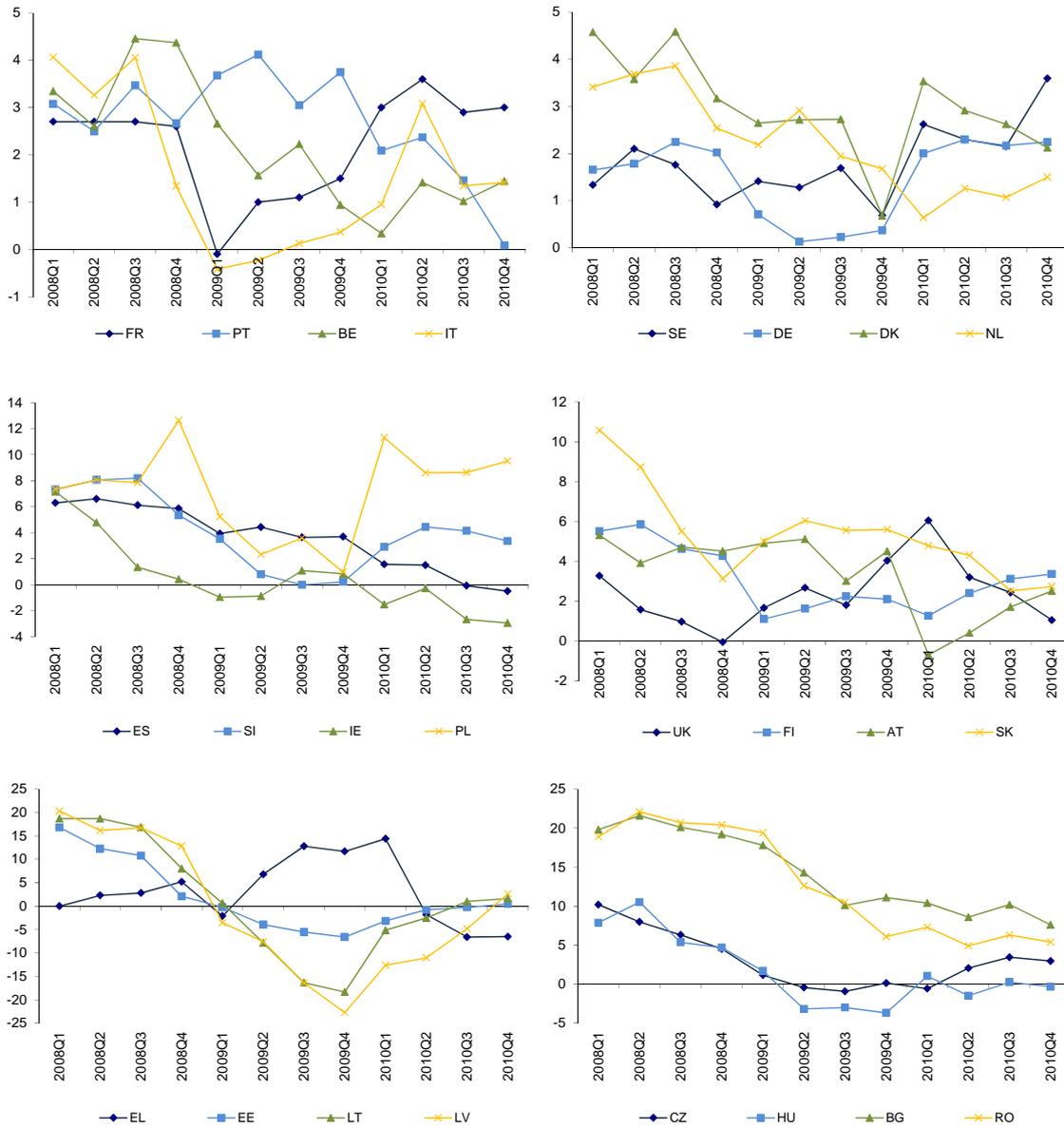
Graph I.3.2: Compensation per employee, y-o-y % change vs level of compensation in PPS, 2010



Source: AMECO.

Graph I.3.2 shows the relation between the variation in compensation per employee and its level measured in Purchasing Power Standards. It could be expected that catching-up countries would on average display higher growth rates in compensation per employee. However, the correlation points to the opposite result. In 2010,

Graph I.3.3: Compensation per employee, y-o-y % change



Note: For BG, EL, FR, AT, RO, Hourly Labour Cost Index is used instead of compensation per employee. Countries were grouped according to the level of variation in compensation per employee to facilitate a better reading of the changes.
Source: Commission services based on Eurostat.

the growth rate in compensation per employee was on average higher in countries with higher levels of compensation per employee. This result is mostly driven by Latvia, Lithuania and Romania. But even not considering these countries, together with Bulgaria that recorded a robust growth rate in compensation per employee, no clear relation would emerge.

Turning to the quarterly profile of wage developments, it appears that the sharpest deceleration in the average growth rate occurred between the fourth quarter of 2008 and the second quarter of 2009 (see Graph I.3.3). This lags by two quarters the decline in GDP, which recorded negative quarter-on-quarter growth between the second quarter of 2008 until the second quarter of 2009. The average growth rate in compensation

per employee continued to decline until the fourth quarter of 2009 and recovered thereafter.

In Germany, France and Italy, after a relatively strong deceleration in 2009, compensation per employee grew above 2% in 2010. The on-going adjustment in wages is stronger in countries facing stronger adjustment and rebalancing needs. Greece and Ireland recorded in 2010 negative growth rates in compensation per employee and in Portugal the growth rate in compensation per employee decreased strongly to near stabilising in the fourth quarter of 2010.

In the non-euro area countries, the Baltics experienced the sharpest falls in compensation per employee in consequence of the strong fall in GDP. The Czech Republic and Hungary also recorded a strong deceleration, with the growth rate in compensation per employee turning negative over 2009. In Romania and Bulgaria the growth rate in compensation per employee decelerated strongly. By 2010, the growth rate in compensation per employee accelerated in most non-euro area countries.

Wage dynamics during the last three years were strongly influenced by the adjustment in the number of hours worked per employee. During 2009 most of the EU Member States experienced a reduction in the number of hours worked per employee. The number of hours worked per employee increased again in 2010 with the economic recovery.

The decline or deceleration in compensation per employee in 2009 reflects both cuts in the nominal compensation per employee and decline in the number of hours worked per employee. In the non-euro area countries, Latvia, Lithuania, and Hungary experienced outright cuts in compensation per hour worked in 2009 and 2010 (see Table I.3.1).

In the euro area, the deceleration in the growth rate in compensation per hour worked was more protracted. In 2009, there was no deceleration. This contrasts with the record low in the growth rate in the compensation per employee. For some countries, the deceleration in the compensation per employee was mostly a consequence of a reduction in the number of hours worked. In other countries, like Luxembourg, Greece, Germany and Austria, compensation per hour worked even increased. This suggests a

reduction in compensation less than proportional to the reduction in number of hours worked.

Table I.3.1: Compensation per hour worked, y-o-y % change

	2008	2009	2010
BE	4.0	3.5	0.9
BG	16.2	9.5	7.8
CZ	6.1	3.6	:
DK	3.5	3.0	2.7
DE	2.2	3.4	-0.1
EE	11.8	3.8	-2.7
IE	5.0	2.3	-2.7
EL	6.8	8.3	-7.3
ES	5.5	3.8	:
FR	2.1	1.6	:
IT	3.1	1.8	1.7
CY	3.3	2.8	2.2
LV	20.8	-9.7	-5.9
LT	12.9	-8.9	-2.6
LU	2.4	6.4	:
HU	6.9	-1.3	-0.1
NL	3.9	2.8	1.4
AT	3.1	3.9	1.2
PL	9.6	5.6	2.2
PT	3.6	3.6	0.5
RO	32.1	-6.6	1.4
SI	5.2	1.2	:
SK	7.8	7.3	1.2
FI	5.0	3.4	0.0
SE	1.3	2.3	1.1
EA	3.3	3.2	0.9

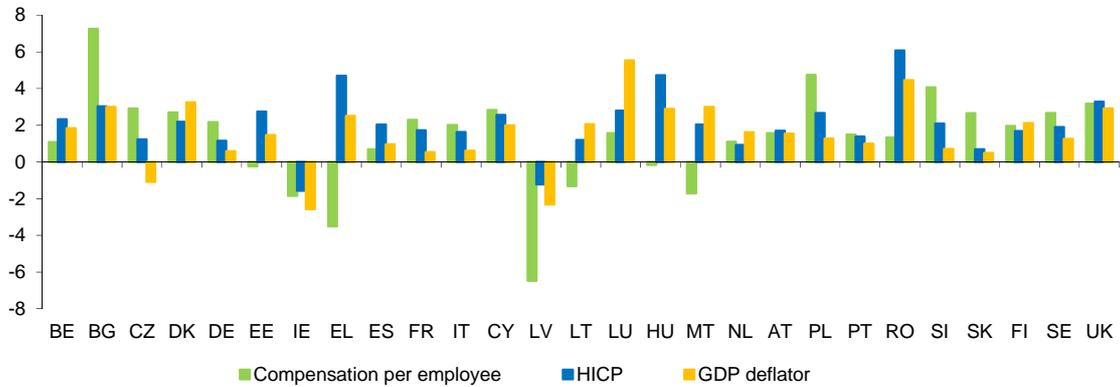
Source: Commission services based on Eurostat data.

In 2010, as the number of hours worked increased, the growth rate in compensation per hour worked decreased more abruptly and even became negative in some countries. In the countries that relied more on the internal margin of the employment adjustment during 2009, e.g. Germany, the analysis of the evolution of compensation per employee and compensation per hour worked gives opposite results in 2009 and 2010.

3.2.1. Real consumption and production wages

The harmonised consumer price inflation (HCPI) grew by 1.6% in the euro area and by 2.1% in the EU in 2010. These figures are higher than those recorded by the GDP deflator, which grew by 0.8% in the euro area and by 1.2% in the EU. These differences are related with import prices. The lowest HICP rate was recorded in Ireland and the highest in Romania. In the euro area Greece recorded the highest HICP. Ireland recorded the lowest GDP deflator, which declined by 2.5%. The highest GDP deflator was recorded in Luxembourg, which also registered the largest difference between the GDP deflator and the HICP (see Graph I.3.4).

Graph I.3.4: Compensation per employee, HICP and GDP deflator, y-o-y % change, 2010



Source: AMECO.

Developments in the GDP deflator and the HICP influence the growth rate of real product wages and real consumption wages. The relevant wage variable for firms is the real product wage, which is the price of labour relative to the value added deflator. For consumers, the variable of interest is the real consumption wage, which is their take-home pay relative to the price of goods and services they purchase.

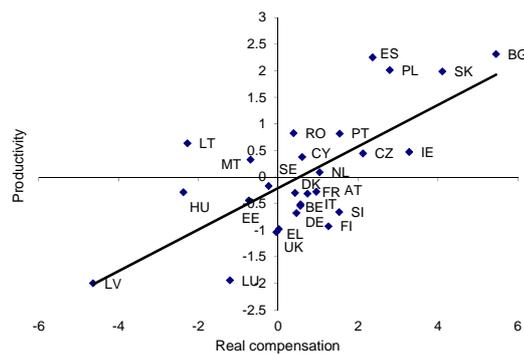
Real product wages declined in about half of the Member States. Greek employers' benefited from the sharpest decline in the cost of labour, with the real product wage declining by 5.9%. By contrast, real product wages increased at a rate above 3% in Slovenia, Poland, the Czech Republic and Bulgaria. Real consumption wages declined in 14 Member States in 2010. Greek workers' suffered the sharpest decline in purchasing power following a drop in real consumption wages near 8%. In Latvia, Hungary and Malta the decline in purchasing power was above 4%. By contrast, in Bulgaria real consumption wages grew above 6%.

3.2.2. Real compensation per employee, productivity and unemployment

Real wage dynamics aligned with productivity are a condition for wage growth consistent with labour demand. Graph I.3.5 shows the average growth rate in real compensation per employee and average growth rate in productivity over the period 2008-2010. During this period, the average growth rate in real compensation per employee increased at a significantly faster pace than the average growth. Belgium, Denmark, Germany, Greece,

France, Italy, Austria and Finland recorded average positive growth in compensation and average negative growth in productivity. In spite of the differences in the order of magnitude between average growth rates in these two variables, there is a clear positive correlation between the average growth rates in real compensation per employee and average growth rates in labour productivity over the past three years.

Graph I.3.5: Real compensation per employee and productivity, average growth rates 2008-2010

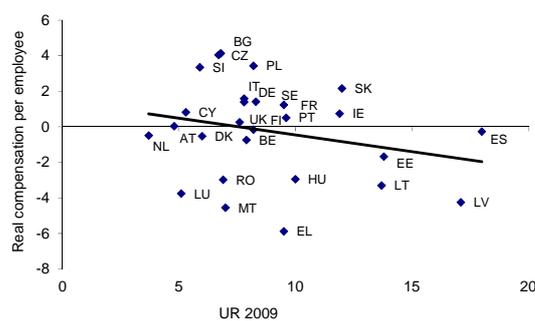


Source: AMECO.

Graph I.3.6 plots the growth rate in real compensation per employee in 2010 against the unemployment rate in 2009. Real wage adjustment in 2010 appears in general only partial conducive to convergence in unemployment rates. While in the Baltic countries, Hungary and Greece real wages adjusted in line with the need to reduce the high unemployment rates, in France, Portugal, Slovakia, Ireland and particularly in Spain the

adjustment in real wages looks insufficient in view of the high level of unemployment. The adjustment in Spain is particularly slow when compared with countries with much lower unemployment rates, such as the Netherlands, Austria, Luxembourg, Denmark, Romania and Malta.

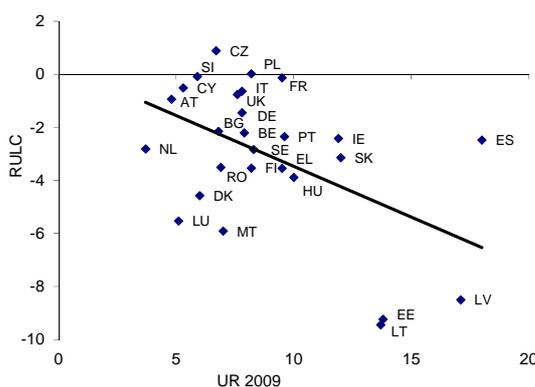
Graph I.3.6: **Real compensation per employee, y-o-y % change 2010 and unemployment rate 2009**



Source: AMECO.

Graph I.3.7 plots the growth rate in real unit labour costs in 2010 against the unemployment rate in 2009. It complements Graph I.3.6 by taking into account labour productivity developments. The main message remains broadly consistent with the results for real compensation.

Graph I.3.7: **RULC, y-o-y % change 2010 and unemployment rate in 2009**



Source: AMECO.

The negative relation is stronger. The same group of countries can be depicted as having an insufficient adjustment in compensation, which suggests that productivity growth was not robust enough to compensate for the relatively slow

adjustment in compensation, in view of the need to absorb unemployment.

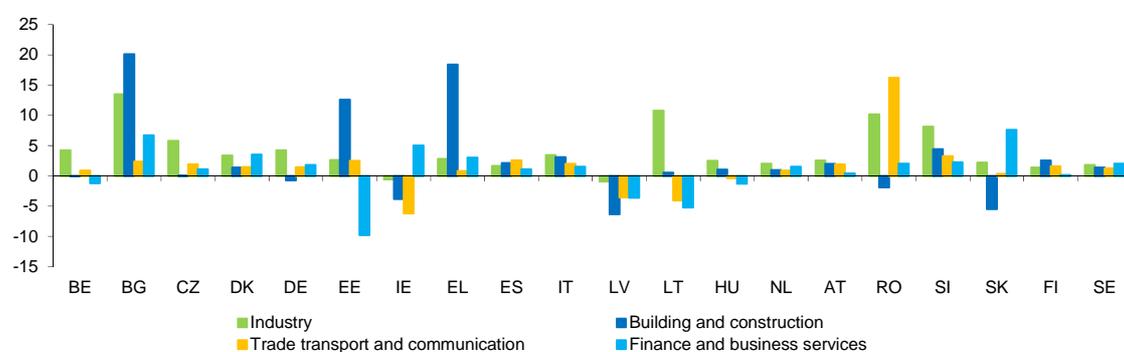
3.2.3. Compensation per employee at sectoral level

The sectoral breakdown of the compensation per employee shows heterogeneous developments across sectors. The growth rate in compensation per employee was on average stronger in the industry excluding the construction sector. It was followed by the growth rate in the compensation in the trade transport and communication (which only halved that of industry) construction and finance and business services sectors (see Graph I.3.8). Overall the growth rate in compensation per employee increased at a higher rate in tradable than non-tradable sectors.

The relative robust growth rate in compensation in the industry sector can be largely explained by the developments in hours worked. During 2009, faced with the reduction in global demand, firms introduced schemes to reduce the number of hours worked of their employees. The reduction in the number of hours worked was broad-based across sectors, but it was more pronounced in the industry sector. As the global demand recovered, firms gradually increased the number of hours worked of their employees. For instance, Germany was one of the euro area countries that reduced more the number of hours worked per employee in 2009. As a consequence, the compensation per employee in 2009 declined. In 2010, the number of hours worked per employed recovered to almost the pre-crisis level, and the growth rate in compensation per employee is just a consequence of the increase in the number of hours worked.

Compensation per employee in the construction sector recovered in 2010, but developments were very uneven across countries. Bulgaria, Greece and Estonia recorded two-digit growth rates. In Bulgaria and Estonia the growth rate in compensation per employee followed strong productivity growth. In Greece, it followed a decline of about same size in the previous year. By contrast, compensation per employee in construction declined in Slovakia, Romania, Latvia and Ireland.

Graph I.3.8: Compensation per employee by sector, y-o-y % change, 2010



Note: Remaining EU countries not included because of missing data.
Source: AMECO.

The growth rate in the compensation per employee in trade, transport and communication had the least heterogeneous developments across countries. Exceptions are the strong growth in Romania and the relatively strong decline in Ireland. The financial services and business activities sector recorded the most moderate growth in the compensation per employee. The negative adjustment continued in the Baltic countries and Hungary and Belgium recorded also a negative growth rate, helped by a further decrease in the number of hours worked per employee in this sector. In Slovakia and Bulgaria compensation per employee continued to grow at a fast pace in this sector, while in Ireland a robust growth was recorded after a decline in 2009.

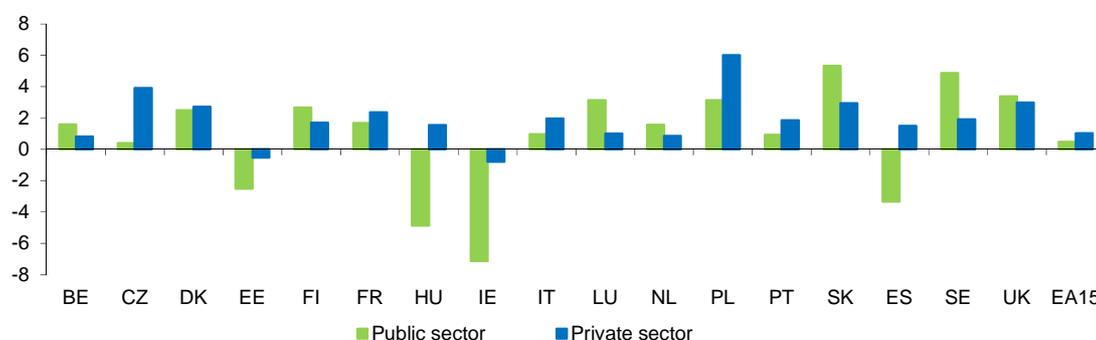
3.2.4. Compensation per employee in private and public sector

Compensation per employee in the public sector was on average lower than in the private sector in 2010 (see Graph I.3.9). Ireland, Hungary, Spain and Estonia recorded a contraction in nominal compensation per employee in the public sector. This was a consequence of decisive measures taken by respective governments with a view to reduce their fiscal deficits. In Ireland, the government imposed a pension levy that came into effect in 2009, followed by further pay cuts in the general public sector (inversely related to income levels) between 5 and 8% in 2010. In Hungary, the pay freeze agreed by the social partners together with further measures to reduce the public wage bill, such as income ceiling and revision of bonuses, caused a contraction in the public sector

wage for the second consecutive year. In Estonia, the wage freeze imposed in 2009 continued in 2010 with further cuts in bonuses. In Spain, the government imposed a 5% cut in civil servants' wages in 2010. Pay freezes were also imposed by governments in Italy, Portugal, Luxembourg and the United Kingdom. Public sector wages continued to grow in these countries, albeit at a much more moderate pace than in previous years in Portugal and Italy.

Public sector wages grew above private sector wages in Belgium, Finland, Luxembourg, the Netherlands, Slovakia, Sweden and the United Kingdom. In Luxembourg and the United Kingdom the increase occurred even after the imposition of a wage freeze. And in Slovakia after a 1% wage cut. Possible explanations are related with wage drift, sectors in public administration not affected by the wage cut or freeze and composition effects, in cases of large employment losses. In Finland the government initially proposed a pay freeze. After negotiations with unions, a marginal pay increase was agreed. And in the Netherlands a 1.5% pay increase was settled in the municipal sector after several months of targeted industrial action by unions.

Graph I.3.9: Compensation per employee in private and public sector, y-o-y % change, 2010



(1) Remaining EU countries not included because of missing data.
Source: OECD.

3.3. TRENDS IN UNIT LABOUR COSTS

Nominal unit labour costs declined both in the euro area and the EU. This represents a record low. The negative growth rate in 2010 follows the record highs registered in 2009, when productivity per person employed declined sharply in consequence of the economic downturn and the reduction in the number of hours worked per employee. The nominal unit labour costs decreased the most in the Baltic countries and Ireland.

The decline in nominal unit labour costs was a consequence of both developments in compensation per employee and labour productivity. On the one hand, compensations per employee were relatively moderate in most countries. On the other hand, labour productivity growth was relatively robust. This resulted in an increase in nominal compensation per employee below that of productivity, which led to a decline in unit labour costs.

Latvia registered the sharpest decline in nominal unit labour cost, on the back of the strongest reduction in nominal compensation per employee, which was complemented with relatively strong productivity growth. In Lithuania it was the strong rebound in productivity that contributed the most for the decline in unit labour costs. Sweden and Denmark also recorded substantial declines in nominal unit labour costs in consequence of strong productivity growth. By contrast, unit labour costs in non-euro area countries grew in the United Kingdom, Poland, Romania and Bulgaria. In the United Kingdom and Romania, productivity

growth was relatively low. In Bulgaria and Poland productivity growth was strong but more so was the growth rate in compensation per employee, the highest and the second highest in the EU respectively (see Table I.3.2).

Table I.3.2: Decomposition of unit labour costs, y-o-y % change, 2010

	NULC	Compensation per employee	Labour productivity	GDP deflator	RULC
BE	-0.4	1.1	1.5	1.8	-2.2
BG	0.8	7.2	6.4	3.0	-2.1
CZ	-0.2	2.9	3.1	-1.1	0.9
DK	-1.5	2.7	4.2	3.3	-4.6
DE	-0.9	2.2	3.1	0.6	-1.5
EE	-7.9	-0.2	8.3	1.5	-9.2
IE	-4.9	-1.9	3.2	-2.6	-2.4
EL	-1.1	-3.5	-2.4	2.5	-3.5
ES	-1.5	0.7	2.3	1.0	-2.5
FR	0.7	2.1	1.4	0.8	-0.1
IT	0.0	2.0	2.0	0.6	-0.6
CY	1.5	2.8	1.3	2.0	-0.5
LV	-10.6	-6.5	4.6	-2.3	-8.5
LT	-7.6	-1.3	6.8	2.1	-9.4
LU	-0.3	1.6	1.9	5.5	-5.5
HU	-1.1	-0.2	1.0	2.9	-3.9
MT	-3.1	-1.7	1.4	3.0	-5.9
NL	-1.2	1.1	2.4	1.6	-2.8
AT	0.6	1.6	1.0	1.5	-0.9
PL	1.3	4.7	3.4	1.3	0.0
PT	-1.4	1.5	2.9	1.0	-2.3
RO	0.8	1.3	0.5	4.5	-3.5
SI	0.6	4.1	3.4	0.7	-0.1
SK	-2.7	2.7	5.5	0.5	-3.1
FI	-1.5	2.0	3.5	2.1	-3.5
SE	-1.6	2.7	4.4	1.3	-2.8
UK	2.1	3.2	1.0	2.9	-0.8

Source: AMECO.

In the euro area, productivity grew at the fastest rate since the inception of the EMU. Estonia, Ireland, Malta and Slovakia are among the euro area countries with sharpest declines in nominal unit labour costs. Estonia benefited from negative growth in nominal compensation per employee and the highest growth rate in productivity. Ireland and

Malta benefited from decrease in nominal compensation per employee and productivity growth. And Slovakia, in spite of recording a growth rate in nominal compensation per employee substantially above the euro area average, benefited from a strong growth in productivity to record a sharp contraction in nominal unit labour costs. By contrast, Greece, suffered the sharpest contraction in nominal compensation per employee of the euro area countries, coupled however with a fall in productivity, which limited the decline in nominal unit labour costs. Productivity developments explain the evolution of nominal unit labour costs in France, Germany and Italy. While the growth rate in compensation per employee was similar in these countries, productivity developments made nominal unit labour costs follow different trajectories, decreasing in Germany, increasing in France and stabilising in Italy.

Real unit labour costs decreased in all countries but Poland and the Czech Republic. The decrease in real unit labour costs was brought about by a rise in real product wage below that of productivity. The Baltic countries and Malta recorded the sharpest declines, in accordance with the decline in nominal unit labour costs. Luxembourg also recorded a sharp decline in real unit labour cost in consequence of the highest GDP deflator in the EU in 2010. In contrast, Ireland recorded the lowest GDP deflator in the EU, which made the contraction in real unit labour costs less pronounced than that in nominal unit labour costs.

The decline in real unit labour costs in 2010 determined a decline in the labour share. This occurs after two consecutive years of relatively robust growth, as a consequence of the fall in economic activity and sluggish labour market adjustment. The wage share reached recorded lows in 2007 in both the euro area and the EU, when it reached 55.4% and 56.5% respectively. It increased to 57.9% in the euro area in 2009 and to 58.6% in the EU. In 2010, it declined to 57% in the euro area and to 57.8% in the EU. ⁽¹⁷⁾

⁽¹⁷⁾ The declining trend in the labour share in the past was governed by capital deepening in conjunction with capital-augmenting technical progress and labour substitution across labour skill categories.

3.3.1. Contributions to the final demand deflator

The contribution of unit labour costs to the overall domestic inflationary pressures is presented in Table I.3.3. As seen above, in the euro area only Austria, Slovenia, France and Cyprus registered positive growth in nominal unit labour costs. Therefore, it is only in these countries that nominal unit labour costs contributed to the increase in the final demand deflator. The same holds for Bulgaria, Romania, Poland and the United Kingdom, which were the only countries outside the euro area where nominal unit labour costs contributed to the increase in the final demand deflator. In all other Member States developments in nominal unit labour costs limited the increase of the final demand deflator or contributed to negative developments in the final demand deflator. These developments are markedly different from the historic average where nominal unit labour costs were the main component of the overall domestic inflationary pressures.

Table I.3.3: Contributions to the final demand deflator, y-o-y % change, 2010

	Import prices	NULC	Indirect taxes	G. oper. surplus	F. demand deflator
BE	2.8	-0.1	0.2	1.1	4.0
BG	1.6	0.3	0.0	1.6	3.6
CZ	0.2	-0.1	0.1	-0.7	-0.4
DK	1.3	-0.6	0.3	2.6	3.6
DE	1.3	-0.4	-0.1	0.9	1.5
EE	2.1	-2.8	-0.9	4.7	1.7
IE	0.3	-1.6	0.4	-0.3	-0.8
EL	0.5	-0.5	1.1	1.4	2.5
ES	1.3	-0.7	1.2	0.3	2.1
FR	0.8	0.3	-0.1	0.4	1.4
IT	1.7	0.0	0.5	0.0	2.3
CY	0.7	0.6	0.0	0.8	2.0
LV	2.2	-3.9	0.1	2.2	0.6
LT	3.3	-2.5	0.4	3.4	4.9
LU	4.4	-0.1	0.1	2.3	7.3
HU	0.8	-0.3	0.7	1.3	2.4
MT	0.0	-0.9	-0.1	2.7	1.4
NL	2.4	-0.5	0.3	1.1	3.1
AT	1.3	0.2	-0.2	1.0	2.1
PL	0.6	0.4	0.7	-0.2	1.5
PT	1.2	-0.6	0.6	0.8	1.9
RO	0.9	0.3	2.0	1.0	4.1
SI	2.1	0.3	0.0	0.2	2.6
SK	2.0	-0.7	-0.4	1.4	2.3
FI	1.5	-0.7	0.1	2.1	2.3
SE	-0.1	-0.7	-0.3	1.9	0.8
UK	1.0	1.1	1.2	0.0	3.4

Source: AMECO.

The other components of the final demand deflator show that import prices contributed the most to the overall domestic inflationary pressures in 2010. In the euro area the contribution of import prices was more significant in Luxembourg, followed by Belgium, the Netherlands, Estonia, Slovenia and

Table I.3.4: **Decomposition of the tax wedge**

	Total Tax Wedge 2010	Of which			Difference 2009 - 2010				Difference 2001 - 2010			
		Personal Income Tax	Social Security Contributions Employee	Social Security Contribution Employer	Total Tax Wedge	Personal Income Tax	Social Security Contribution Employee	Social Security Contribution Employer	Total Tax Wedge	Personal Income Tax	Social Security Contribution Employee	Social Security Contribution Employer
AT	47.9	11.4	14.0	22.6	0.1	0.1	0.0	0.0	1.0	1.0	0.0	-0.1
BE	55.4	21.6	10.8	23.0	0.0	0.1	0.0	-0.1	-1.3	-0.4	0.2	-1.1
BG*	33.8	7.4	11.0	15.5	-1.3	0.1	0.2	-1.6	-6.6	-1.2	4.7	-10.1
CY**	13.9	2.1	5.9	5.9	-0.2	-0.2	0.0	0.0	-6.9	-2.3	0.3	-5.0
CZ	42.2	8.6	8.2	25.4	0.2	0.2	0.0	0.0	-0.4	1.2	-1.1	-0.6
DE	49.1	15.7	17.2	16.2	-1.8	-1.6	-0.1	-0.1	-2.9	-2.1	0.1	-0.9
DK	38.3	27.9	10.7	0.0	-1.2	-0.9	0.0	0.0	-5.1	-4.6	-0.1	0.0
EL	36.6	2.2	12.5	21.9	-1.6	-1.6	0.0	0.0	1.9	1.7	0.1	0.1
EE	40.0	12.3	2.1	25.6	0.8	-0.2	0.8	0.3	-1.0	-3.8	2.1	0.8
ES	39.6	11.7	4.9	23.0	1.4	0.1	0.0	1.3	0.8	1.2	0.0	-0.4
FI	42.0	18.0	5.8	18.2	-0.3	-0.5	0.7	-0.5	-4.4	-3.2	0.6	-1.8
FR	49.3	9.9	9.6	29.7	0.1	0.1	0.0	0.0	-0.5	-1.1	0.1	0.5
HU	46.4	11.0	13.2	22.2	-6.6	-4.6	0.4	-2.5	-9.4	-7.5	4.3	-6.1
IE	29.3	13.0	6.6	9.7	0.4	-0.2	0.6	0.0	-1.9	-3.0	2.0	-1.0
IT	46.9	15.4	7.2	24.3	0.0	0.0	0.0	0.0	0.4	1.1	0.3	-1.0
LT*	40.7	10.1	6.9	23.8	-0.9	-5.5	4.6	0.0	-5.0	-9.6	4.6	0.0
LU	34.0	12.7	10.9	10.3	0.2	0.2	0.0	0.0	-1.8	-1.0	0.6	-1.4
LV*	64.1	9.6	4.5	50.0	22.5	-5.3	-2.8	30.6	20.9	-5.8	-2.6	29.3
MT*	22.3	8.5	6.9	6.9	-0.5	-0.3	-0.1	-0.1	-1.1	-0.9	-0.1	-0.1
NL	39.2	14.5	15.3	9.4	1.2	-0.5	1.4	0.3	1.9	5.0	-2.8	-0.2
PL	34.3	5.9	15.5	12.9	0.1	0.1	0.0	0.0	-3.8	0.5	-2.8	-1.5
PT	37.7	9.7	8.9	19.2	0.3	0.3	0.0	0.0	1.3	1.3	0.0	0.0
RO*	44.4	9.3	12.8	22.3	2.0	-0.2	0.5	1.7	-3.5	1.1	3.8	-8.4
SE	42.7	13.5	5.3	23.9	-0.5	-0.5	0.0	0.0	-6.4	-5.6	0.0	-0.8
SI	42.4	9.5	19.0	13.9	0.1	0.1	0.0	0.0	-3.8	-1.7	0.6	-2.7
SK	37.8	6.4	10.6	20.8	0.1	0.1	0.0	0.0	-4.7	0.7	1.3	-6.8
UK	32.7	14.7	8.3	9.7	0.2	0.1	0.1	0.1	0.6	-1.0	0.8	0.7

(1) Single person without children, 100% of AW

Source: OECD, Taxing wages report. **2007 data *2009 data.

Slovakia. Of the non-euro area countries the contribution of import prices for domestic inflationary pressures was stronger in Lithuania and Latvia. The high contribution of import prices for the overall domestic inflationary pressures in 2010 occurred on the back of soaring commodity prices that have increased markedly over 2010. The contribution of gross operating surplus was particularly high in Estonia. Finally, net indirect taxes were the lowest contributor to the increase in the final demand deflator in most member states, though its size is relatively large in Romania, the United Kingdom, Spain and Greece.

3.3.2. Unit labour costs and the tax wedge

Taxes and social security contributions drive a wedge between the cost for the employer and the net compensation received by the employee. Table I.3.4 shows the breakdown of the total tax wedge and its evolution over the period 2001-2010. Belgium, France and Germany display the highest tax wedge. Belgium has the second highest rate on personal income tax, Germany has the second highest rate on employees' social security

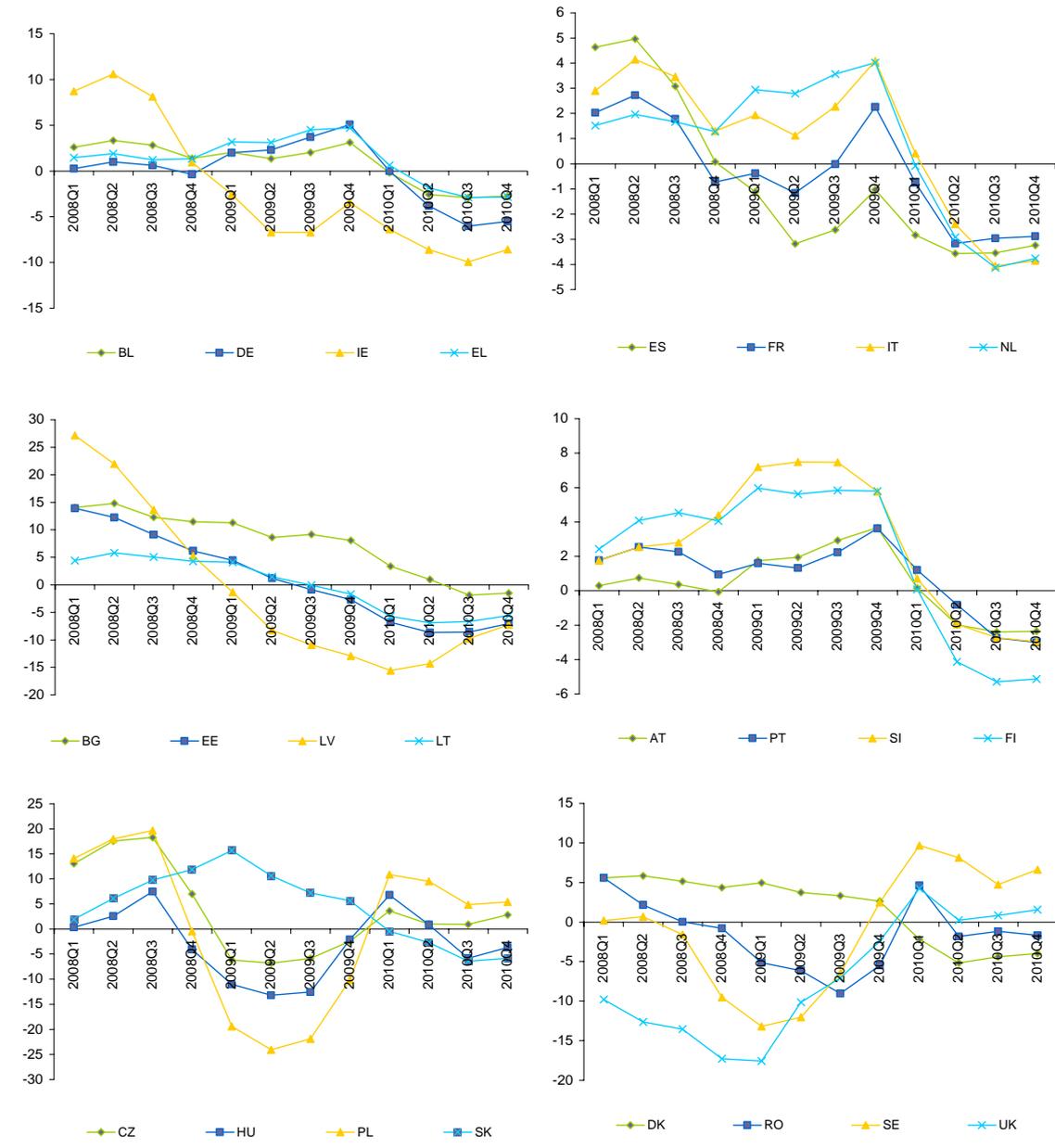
contributions and France has the second highest rate on employer's social security contributions.

Over the period 2001-2010, the tax wedge decreased in most countries. Hungary, Cyprus, Bulgaria, Sweden, Denmark and Lithuania recorded the sharpest reductions. In the euro area, the tax wedge decreased the most in Finland and Slovenia and Germany. Between 2009 and 2010, Hungary recorded the sharpest reduction on the back of reduction in employers' social security contribution and personal income tax. Germany and Greece also recorded substantial reduction in the tax wedge owing to the reduction of the wedge related to personal income tax.

3.4. PRICE COMPETITIVENESS DEVELOPMENTS

Cost competitiveness relative to a group of 35 industrialised nations improved in most of the EU Member States over the 2008-2010 period. Developments were uneven. REERs based on ULC appreciated during 2008 and 2009 before depreciating in most countries in 2010. In the EU,

Graph I.3.10: REERs based on ULC, y-o-y % change, 2008Q1-2010Q4



Source: DG ECFIN's price and cost competitiveness indicators.

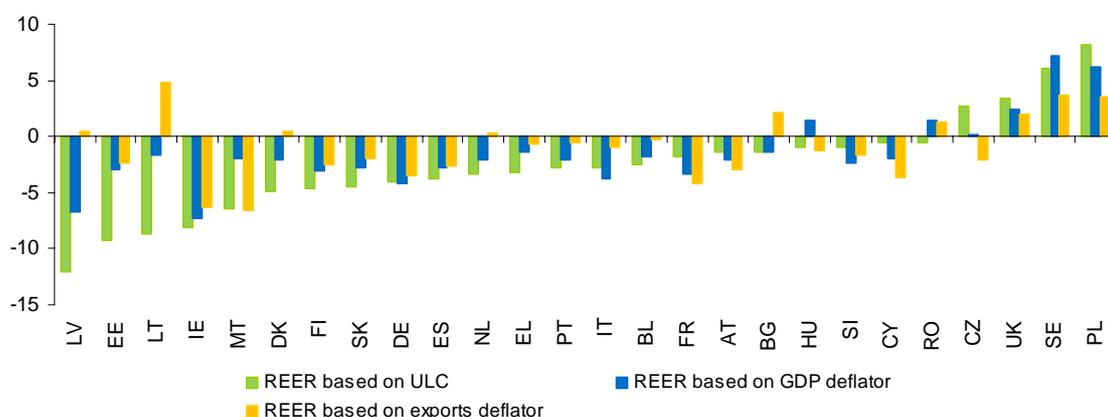
the level of REERs decreased by 15 points from the first quarter of 2008 to the fourth quarter of 2010. In the euro area, REERs decreased by 4 points over the same three-year period.

Adjustments in competitiveness positions also occurred within the euro area and the EU, as REERs followed different patterns across Member States. In the euro area, most countries recorded an

appreciation in REERs during the 2008-2009 period. Notable exceptions were Ireland and Spain, which started the adjustment in 2009.

Graph I.3.10 indicates that the appreciation of REERs based on ULC peaked in the fourth quarter of 2009. In 2010, REERs based on ULC depreciated in all euro area countries. These developments in REERs reflect the evolution in

Graph I.3.11: REERs based on ULC deflator, GDP deflator and export prices deflator, y-o-y % change, 2010



(1) Note: BE also includes LU.
Source: AMECO.

own nominal unit labour costs. Between 2008 and 2010, Ireland and Spain recorded the sharpest depreciation in REERs based on ULC in the euro area, while Slovakia and Slovenia recorded the strongest appreciations.

Competitiveness developments in non-euro area Members were significantly different from those in the euro area. The Baltic countries recorded the most notable depreciation in REERs based on ULC. In the Czech Republic, Hungary, Poland, Romania, Sweden and the United Kingdom, REERs decreased in 2009 and increased in 2010. In the Baltic countries the depreciation in REERs is related to the evolution of the nominal unit labour costs. In the other countries depreciations in nominal exchange rates influenced the evolution of the REERs.

Broad and narrow measures of REERs give generally the same signs. Graph I.3.11 shows the year-on-year evolution of REERs based on ULC deflator, GDP deflator and export price deflator. This allows a distinction between broad and narrow measures of REERs. While REERs based on ULC and GDP cover the entire economy, export prices deflator concerns prices of exports only. Over relatively long time horizons, broad REERs indicators convey similar information regarding competitiveness positions. But in the short-term they may differ substantially. Possible reasons are related with the evolution of profit margins and indirect taxation. Differences may

exist between broad and narrow measures of REERs. This may be indicative of different price dynamics in tradable and non-tradable sectors and composition of exports. Graph I.3.11 shows that REERs based on the different deflators are aligned but there are conflicting signals in some countries.

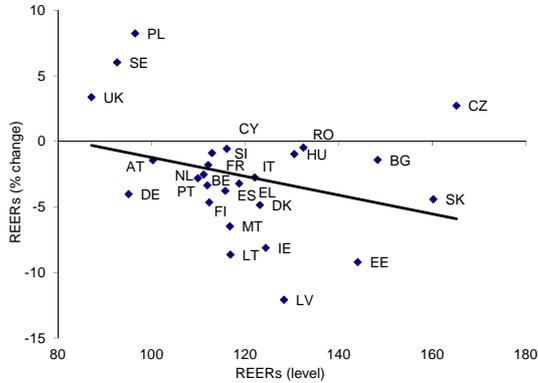
REERs based on nominal unit labour costs increased only in the Czech Republic, the United Kingdom, Sweden, and Poland. This is related with both increase in unit labour cost above those in competitor countries (except Sweden) and appreciation of the currencies after the strong devaluation in 2009. By contrast, the Baltic countries followed by Ireland and Malta recorded the sharpest depreciations, in line with the sharp declines in unit labour costs.

REERs based on GDP deflator depreciated the most in Ireland and Latvia. The depreciation of REERs based on the GDP deflator was in general smaller than those based on ULC, especially in countries with the largest falls in ULC. In the Baltic countries there was a strong increase in the gross operating surplus, after the sharp falls of the previous year. In Hungary and Romania REERs based on ULC depreciated while REERs based on GDP appreciated. This may be related with the 5 points VAT increase in both countries. In the Czech Republic redistribution of income between workers and firms has played a role in shaping competitiveness. The increase in nominal unit

labour costs has been offset by a decreased in profit margins.

REERs deflated by the export prices show the lowest average variations. In a number of countries they give a conflicting signal to that of REERs based on ULC or GDP deflators. Lithuania registered the largest difference in REERs based in the export deflator and REERs based on ULC. This may be related to the large difference between the variation in compensation in industry and the other sectors (see Graph I.3.8). In France, Austria, Cyprus and the Czech Republic, REERs based on the export deflator depreciated more than the REERs based on ULC. This suggest that export firms in these countries have tried to offset the increase in cost competitiveness through a drop in profit margins, or the unit labour cost in export sectors varied considerable from those for the whole economy.

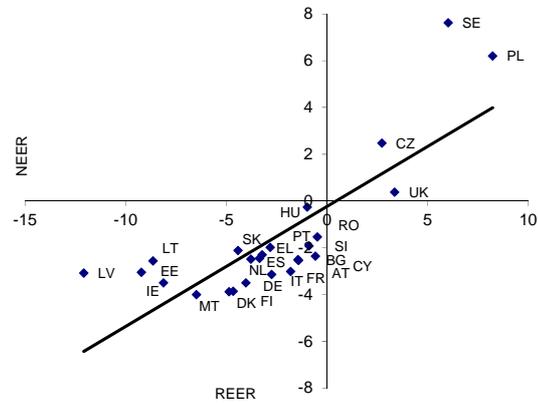
Graph I.3.12: Level of REERs based on ULC (2000=100) and y-o-y % change, 2010



Note: BE also includes LU.
Source: AMECO.

The negative relation between the variation in REERs and their level shows some signs of adjustment in cost competitiveness in 2010 (see Graph I.3.12). REERs appreciated in countries with comparatively depreciated REERs. This was the case of the United Kingdom, Sweden and Poland. All countries with appreciated exchange rates depreciated instead. The Czech Republic was the only exception. Estonia, Latvia, Ireland, Lithuania and Malta were the countries more strongly driving the negative correlation, as they recorded the strongest depreciation and have the higher REERs. In contrast, the Czech Republic increased further the level of appreciation of its REER based on ULC.

Graph I.3.13: REERs based on ULC and NEERs, y-o-y % change, 2010



Note: BE also includes LU.
Source: AMECO.

Movements in the nominal effective exchange rates (NEERs) influenced the evolution of REERs. The strongest relation is not surprisingly for countries with flexible exchange rate. Sweden recorded the sharpest relative appreciation in the nominal effective exchange rate. As a result it registered a strong appreciation in the REER based on ULC, in spite of the substantial reduction in unit labour costs. In Poland the appreciation in the REER was influenced by the NEER and by an increase in nominal unit labour costs above its competitors. The Czech Republic recorded an appreciation in the real effective exchange rate of about the same size of the nominal effective exchange rates (see Graph I.3.13).

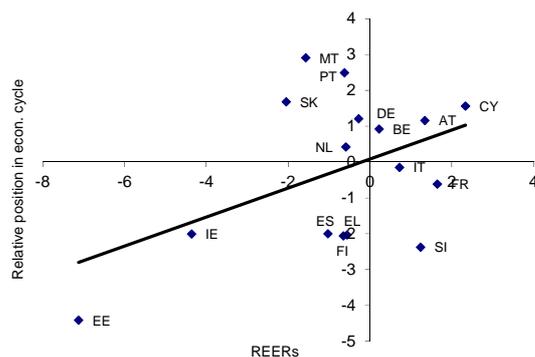
3.4.1. Competitiveness and adjustment in the euro area

In the euro area nominal unit labour costs should adjust to differences in business cycle developments. In the face of a positive (negative) asymmetric shock, unit labour costs in the country affected by the shock should increase faster (slower) than in the remaining euro area Member States in order to rebalance cyclical competitiveness positions.

Graph I.3.14 shows the year-on-year changes in REERs based on ULC and the relative output gap, calculated as the difference between the output gap of each individual country with that of the euro area. All countries recorded an output below potential. Countries lying above the x-axis

recorded a better cyclical position in relation to the euro area and below the x-axis are the countries that performed relatively worse than the euro area.

Graph I.3.14: REERs based on ULC, y-o-y % change, and relative output gap, 2010

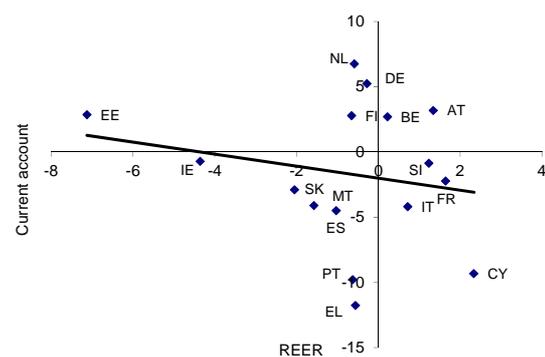


(1) BE also includes LU.

Source: Commission services based on AMECO data.

balances are the largest, recorded a depreciation in REERs similar to that of the Netherlands, where the current account surplus is the largest.

Graph I.3.15: REERs based on ULC, y-o-y % change, and current account balance, 2010



(1) BE also includes LU.

Source: Commission services based on AMECO data.

The results point to a positive relation between the relative output gap position and changes in REERs.⁽¹⁸⁾ Changes in REERs varied considerably across countries in similar cyclical position. Ireland, Finland, Spain, Greece and Slovenia were all in similar cyclical positions and recorded an economic performance relatively worse than that of the euro area. However, Ireland recorded a strong depreciation of the REER while Slovenia only recorded a slight decline in REER after the strong appreciation of 2009.

Apart from contributing to the absorption of cyclical divergences, competitiveness adjustment is also key for the external rebalancing of the economies. Graph I.3.15 plots the current account balance in proportion of GDP against changes in REERs based on ULC in 2010. There are large differences in the current account. The Netherlands, Germany and Luxembourg (not shown in the graph) recorded the largest surplus. Greece, Portugal and Cyprus recorded the largest deficits. The correlation between the variation in REER and the current account is negative, suggesting that in general REER changes are helping the external rebalancing of the economy. However, the negative correlation is weak and mainly driven by Estonia and Cyprus. Notably, Greece and Portugal where the current account

3.5. POLICY DEVELOPMENTS

The crisis has shown the vulnerability of several countries to domestic and external imbalances. It has reinforced the importance of wage adjustment for absorbing unemployment and enhancing inter-sectoral reallocation.

Since the onset of the crisis, wage cuts or wage freezes in the public sector have been introduced to sustain fiscal consolidation. At the same time, better adjustment capacity of wages to productivity developments at local level through the use of opening clauses has gained importance. In countries under the greatest financial distress, minimum wages were also a part of adjustment to enhance reallocation and restore competitiveness. Tax policy has supported moderate wage developments by cutting tax burden on labour in many countries, notably at the beginning of the crisis. This tendency has become less clear since 2010 due to pressing fiscal consolidation needs in a number of countries.

⁽¹⁸⁾ This result is confirmed in empirical work on larger samples (e.g., Biroli, Mourre, and Turrini, 2010).

3.5.1. Reform activity after the crisis and during the recovery

Wages in the public sector ⁽¹⁹⁾

Since the onset of the crisis, far-reaching fiscal consolidation programs were introduced in several countries. Altogether, about a half of the EU countries have seen either wage freezes and/or wage cuts in the public sector since 2008. Depending on the depth of the adjustment, wage cuts, wage or hiring freezes, and outsourcing of public services were undertaken relatively early, as in the Baltics and Hungary, or more recently, such as in Spain, Portugal and Italy. In other countries, measures to curb public expenditure were taken on a continued basis, such as in Ireland and Greece, where reductions or freezes of public employees' salaries were implemented already in 2009 and followed by further consolidation measures in 2010. The largest wage cuts were recorded in the Baltics and Romania.

In contrast to the private sector, cutting jobs in the public sector has been exceptional. Collective bargaining outcomes in the public sector tend to be distributive in the sense that employment security is usually not tradable against wage moderation. Thus, several governments (e.g. Greece, Ireland, Italy, Romania, and Spain) introduced hiring freezes or limited the replacement of retired workers. Yet, job cuts were taken or announced in Latvia, Lithuania, Bulgaria, Czech Republic, Germany and the United Kingdom

Collective bargaining ⁽²⁰⁾

Several *negotiated solutions* have been adopted to deal with the consequences of the crisis. Many collective agreements at sectoral level concluded since 2008 included provisions to increase the flexibility of wages at the firm level. In Finland, a collective agreement for the technological manufacturing sector allows for suspension clauses of the pay agreed at the sectoral level under certain conditions (i.e. if the company is in a distressed

financial position; if the demand is temporarily weak; or wage increases would threaten jobs). Similar agreements were signed in Germany or in Sweden. In the last country, a collective agreement for engineers and architects establishes that wage increases are exclusively set at the local level.

In 2010 measures towards greater decentralisation in wage setting included an introduction of specific firm level collective agreements which allow firms to adjust wages according to its market situation (Greece) and restrictions on the extension of sectoral collective agreement to non-signatory parties (Slovakia). Greece reviewed also the collective dispute regulation procedure which was in the past often a source of an upward wage drift.

Social partners had also an essential role in implementation of statutory provisions on short time working and partial unemployment at company and sectoral level (e.g. Germany, Austria, Belgium, the Netherlands). For example, in Germany collective agreements in many sectors defines top-ups to the statutory provision on short time working benefits. In countries where collective agreement is mainly at the enterprise level (Bulgaria, Hungary and Poland), short-time schemes were implemented through company agreements, mostly in multinational companies.

Wage adjustments as a response to working time adjustments varied substantially across companies, spanning from fully maintained wages (e.g. in Volvo, Renault, DAF Trucks) to a proportionate reduction (e.g. Schaeffler, Daimler). In view of strengthening employability of workers on the long run, training was often included in collective agreements as an essential component of short time working schemes.

The minimum wage

In the period 2008-2009, a cut in the minimum wage was rare and only few countries increased the minimum wage by less than initially envisaged. Since 2010, countries with the largest macroeconomic imbalances have reduced the minimum wage to restore competitiveness and foster labour reallocation. In Ireland, the statutory minimum wage was cut, while in Portugal it was increased by less than envisaged by the 2006 tripartite agreement. In Greece, sub-minima for young aged below 25 were introduced and the

⁽¹⁹⁾ This section draws on Glassner, V. and A. Watt (2010), "Cutting Wages and Employment in the Public Sector: Smarter Fiscal Consolidation Strategies Needed", *Intereconomics*, 45 (4).

⁽²⁰⁾ This section draws on Glassner, V. and M. Keune (2010), "Collective bargaining responses to the economic crisis in Europe", ETUI Policy Brief, Issue 1/2010.

minimum wage frozen until 2012. Conversely, to protect income of the lowest-paid workers, the minimum wage was increased in several countries, in particular in those with a relatively low minimum wage as a percentage of the average wage (below the EU median).

Tax wedge

To reduce labour costs and support labour demand, in particular of low-income earners, the tax wedge was cut during the crisis in several EU countries, among them also in the countries with relatively high tax wedges, such as Belgium, Hungary, Germany, France, Austria and Sweden.

In 2010, the consolidation of public finances became a priority in many countries, resulting in higher tax burden on labour. In 2010 the tax burden on labour was increased in countries with relatively low tax wedges such as Ireland, the United Kingdom, Luxembourg, Greece, Portugal and Spain.

On the other hand, EU countries with fiscal space continued to reduce the tax burden on labour to support labour demand and labour supply. Some countries with high tax wedge have shifted tax burden from labour to other sources of taxation (e.g. Hungary, Germany, Finland and Denmark).

Personal income tax has been changed in almost all countries in 2010. A majority of reforms augmented tax progressivity, while social security contributions remained mainly unchanged. Where changes have occurred, increases were prevalent, notably by expanding the tax base rather than raising the rates.

3.5.2. Policy priorities looking forward

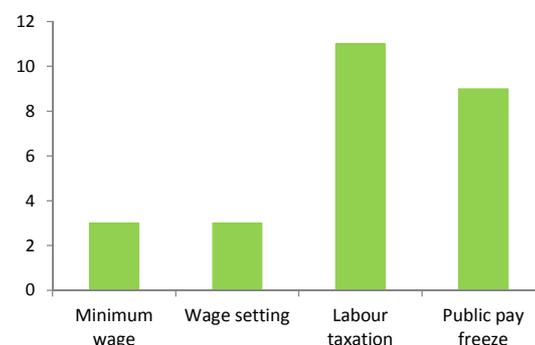
In light of the overarching priority to ensure the rebalancing of EU economies, the 2001 Commission Annual Growth Survey includes recommendations on wages. "Strict and sustained wage moderation, including the revision of indexation clauses in bargaining systems" were recommended for countries characterised by large current account deficits. The Joint Employment Report recognises "from a macroeconomic perspective, wage dynamics are also important for the correction of internal and external imbalances". Reforms in wage setting institutions are also part

of reform packages agreed by countries under financial assistance programmes.

In their 2011 National Reform Programmes (NRPs) Member States included a series of policy measures and reforms with relevance for the wage formation system.

The reduction of tax wedge, in particular for vulnerable groups (i.e. low wage persons, second earners, long-term unemployed) is an objective common to several countries, in particular those with a relatively high tax wedge such as Belgium, Hungary, France and Austria (Graph I.3.16). Only few measures entail an increase in the tax burden. To support fiscal consolidation, public sector wages will remain frozen in the years ahead in several EU countries. On the hand, more flexible wage setting will be on agenda in a relatively few countries (Belgium, Italy, Finland).

Graph I.3.16: Number of countries announcing reforms



Source: Commission services, National Reform Programmes. Ireland, Greece and Portugal are not taken into account. Information about the public pay freeze comes from the ETUC annual collective bargaining questionnaire.

3.6. CONCLUSION

In spite of growth resuming and inflation picking up, compensations per employee continued to grow at a moderate rate in 2010 in most of EU countries, reflecting the protracted labour market slack.

Reductions in nominal compensation per employee were recorded in 2010 in the three Baltics, Greece, Ireland, Malta and Hungary, largely as a result of salary cuts in the public sector. Sustained nominal

wage increases were instead registered in Bulgaria, Poland, Slovenia, the UK, Cyprus, the Czech Republic.

In light of rising inflation compared with 2009, real compensations per employee fell in 13 EU countries and real unit labour costs fell in most Member States. The fact that real wage growth was moderate in comparison with productivity would in principle help reducing unemployment. In general, the degree of adjustment in real unit labour costs reflects the magnitude of unemployment. However, while in some high unemployment countries the adjustment was comparatively strong (the Baltics), in others it was weaker than that recorded in some countries with low unemployment (Spain, Slovakia, Ireland).

The remarkable productivity improvement, coupled with wage moderation, resulted in a reduction in unit labour costs which appear to be consistent with the external rebalancing of EU economies: the competitiveness gains were in general more marked in countries with larger current account deficits.

4. EU LABOUR MARKET OUTLOOK

After a year of continued economic expansion following the 2009 recession, the European economy is expected to continue a muted recovery in 2011 and 2012. Despite persisting risk factors relating inter-alia to tensions in sovereign bond markets, credit supply, and inflationary pressures in emerging economies, private domestic demand is gradually gathering pace, and economic growth becoming increasingly self-sustaining. Hard data confirm that the recovery is broadening not only across countries but also across sectors. According to the Spring 2011 Commission Services Forecast, EU GDP is expected to expand by 1.8% in 2011 and by 1.9% in 2012. In the euro area, economic expansion is likely to edge up from 1.6% in 2011 to 1.8% in 2012. All in all, in spite of demand resuming and output gaps narrowing, the recovery appears more muted compared with previous episodes of growth after major recessions.

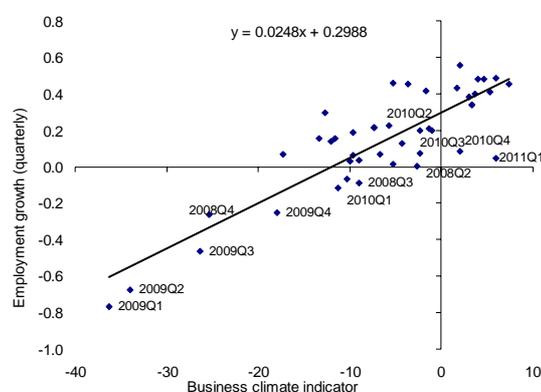
Growth patterns are expected to remain highly different across countries in 2010, reflecting individual challenges policies pursued. Estonia, Lithuania, Luxembourg, Poland and Sweden will register a momentum twice as high as the EU average. Spain and Ireland are expected to register GDP growth well below that of the EU average. In Greece and Portugal economic activity is forecast to contract again in 2011, amid the ongoing fiscal consolidation. In 2012, GDP growth is instead expected to gain momentum in most of the EU Member States.

EU labour market conditions stabilized in the course of 2010 and have recently started improving. Employment in the EU rose since mid-2010, while the unemployment rate remained broadly unchanged at the level of 2009, just above 9.5% in the EU and 10% in the euro area. Taking into account the slightly positive carry-over from 2010, employment is expected to grow by 0.5% in 2011 and to gradually speed-up to 0.7% in 2012 both in the EU and the euro area. The unemployment rate in the EU is expected to steadily retrench over the forecast horizon, declining to 9.5% and 9.1% in 2011 and 2012, respectively. For the euro area, unemployment forecasts are less optimistic (10% and 9.6% respectively in 2011 and 2012). As discussed in Chapter 1, the EU unemployment response to growth is moving back to normal values, after the period of exceptional employment resilience

immediately after the recession, largely as a result of labour inputs adjusting on the extensive margin, and the surge in layoffs that took place in late 2009 and early 2010. Indeed, the adjustment on the intensive margin appears complete, and hours worked per employee have stopped growing. The expected relatively muted unemployment recovery is therefore expected to be mostly the result of the lacklustre growth, the usual lags with which employment adjusts to economic activity and highly resilient participation rates.

One of the reasons that may have held back the employment recovery in 2010 is the pending uncertainty on the growth outlook, which may have induced a wait-and-see attitude on the part of firms. As revealed by Graph I.4.1, employment growth in 2010 was much below what predicted on the basis of business sentiment, as proxied by the Business Climate Indicator.

Graph I.4.1: Business climate indicator and employment growth in the EU (2000Q1-2011Q1)



(1) Business climate indicator of the monthly business survey in Industry

Source: ECFIN.

The reason could be that growth was perceived as more uncertain. The fact that job creation in 2010 took place especially in terms of temporary and part-time jobs surrogates the argument that uncertainty on the economic outlook played a role. Looking forward, as the economic recovery consolidates and uncertainty evaporates the employment recovery would gather momentum.

Recent information from sentiment indicators supports the views that the recovery in employment is on its way. In particular, surveys of

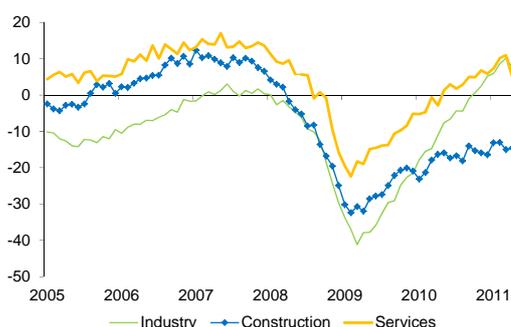
Table I.4.1: Employment growth and unemployment rate forecasts by EU Commission (DG ECFIN), OECD and IMF

	Employment (annual percentage change)						Unemployment (percentage of civilian labour force)							
	ECFIN			OECD		IMF		ECFIN			OECD		IMF	
	2010	2011	2012	2011	2012	2011	2012	2010	2011	2012	2011	2012	2011	2012
BE	0.7	0.8	0.7	0.8	0.9	0.7	0.9	8.3	7.9	7.8	7.6	7.3	8.4	8.2
BG	-5.9	0.5	1.0					10.2	9.4	8.5			8.0	6.7
CZ	-0.8	0.0	0.0	0.7	0.7			7.3	6.8	6.4	6.6	6.3	7.1	6.9
DK	-2.1	0.2	0.4	0.0	1.1			7.4	7.1	6.7	7.2	6.4	4.5	4.4
DE	0.5	0.9	0.5	1.0	0.6	0.5	0.2	7.1	6.4	6.0	6.0	5.4	6.6	6.5
EE	-4.8	4.2	1.3	3.2	1.6			16.9	13.0	11.5	14.2	13.0	14.8	12.8
IE	-4.1	-1.5	0.4	-2.4	-0.6	-1.5	1.5	13.7	14.6	14.0	14.7	14.6	14.5	13.3
EL	-2.1	-2.6	0.1	-3.7	-0.3	-2.4	-0.1	12.6	15.2	15.3	16.0	16.4	14.8	15.0
ES	-2.4	-0.6	0.9	-0.7	0.9	0.3	1.0	20.1	20.6	20.2	20.3	19.3	19.4	18.2
FR	0.1	0.8	0.9	0.6	1.0	0.0	0.6	9.7	9.5	9.2	9.0	8.7	9.5	9.1
IT	-0.7	0.4	0.9	0.4	0.8	0.3	0.7	8.4	8.4	8.2	8.4	8.1	8.6	8.3
CY	-0.3	0.2	0.8			1.0	1.0	6.5	6.3	5.6			6.5	6.3
LV	-4.8	1.5	1.7					18.7	17.2	15.8			17.2	15.5
LT	-5.1	2.1	2.8					17.8	15.5	12.7			16.0	14.0
LU	1.6	2.1	2.3	2.2	2.0	1.8	1.8	4.5	4.4	4.2	5.4	4.8	5.9	5.8
HU	0.2	0.4	3.0	-0.2	1.0			11.2	11.0	9.3	11.5	11.0	11.5	10.9
MT	2.2	1.3	1.4			1.2	1.2	6.8	6.8	6.7			6.5	6.4
NL	-0.6	0.5	0.7	0.6	0.7	-0.2	0.2	4.5	4.2	4.0	4.2	4.0	4.4	4.4
AT	1.0	0.8	0.7	1.4	0.7	0.3	0.3	4.4	4.3	4.2	4.2	4.0	4.3	4.3
PL	0.4	1.1	1.0	0.7	1.2			9.6	9.3	8.8	9.4	8.5	9.0	8.7
PT	-1.5	-1.5	-0.9	-1.5	-1.3	-0.8	-0.7	11.0	12.3	13.0	11.7	12.7	11.9	12.4
RO	-1.8	0.1	0.6					7.3	7.2	6.8			6.6	5.8
SI	-2.2	-1.3	0.3			-0.3	0.4	7.3	8.2	8.0			7.5	7.2
SK	-1.4	0.6	0.9	0.9	1.0	1.9	1.6	14.4	14.0	13.3	13.8	12.8	13.3	12.1
FI	-0.4	0.9	0.7	0.7	0.5	0.8	0.7	8.4	7.9	7.4	7.9	7.1	8.0	7.8
SE	1.1	1.9	1.1	2.3	1.2			8.4	7.6	7.2	7.5	7.0	7.4	6.6
UK	0.2	0.4	0.5	0.5	0.2	0.6	0.7	7.8	8.0	7.8	8.1	8.3	7.8	7.9
EA-16	-0.5	0.4	0.7	0.3	0.5			10.1	10.0	9.7	9.7	9.3	9.9	9.6
EU-27	-0.5	0.4	0.7					9.6	9.5	9.1			na	na
US	-0.6	0.8	1.3	0.9	1.9	2.1	2.3	9.6	8.7	8.1	8.8	7.9	8.5	7.7
JP	-0.6	-0.2	0.1	0.0	-0.2	-0.2	-0.4	5.1	4.9	4.8	4.8	4.6	4.9	4.6

Source: EU Commission Spring 2011 forecast, IMF World Economic Outlook database April 2011, OECD Economic Outlook n°89 June 2011. The OECD does not publish economic forecasts for BG, CY, LV, LT, MT, SE and the EU27 aggregate. For the euro area by OECD, 15 countries are considered (no Cyprus and no Malta).

employment expectations were back or above their pre-crisis levels in all sectors at the end of the year, except in the construction industry (Graph I.4.2). The euro area PMIs for employment expectations also point towards positive employment growth.

Graph I.4.2: Employment expectations in the EU business surveys (industry, construction and services)



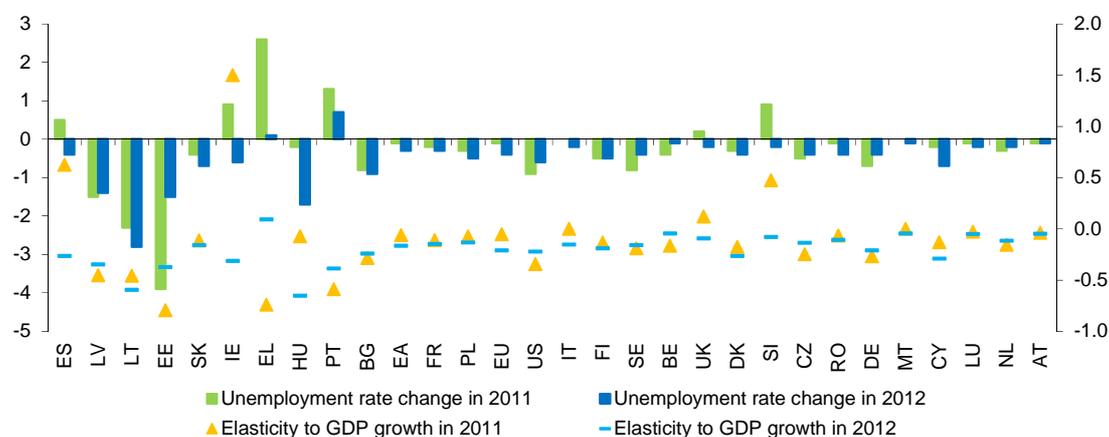
Source: European Commission.

A key question is the speed at which the incipient employment recovery will bring back unemployment rates to pre-crisis levels. The recent shifts in the Beveridge curve signalling a worsening labour matching (chapter 1) and the forecast increase in the

NAIRU for 2011 and 2012 (reaching 9.1 and 9.2% in the euro area and 8.6% and 8.8% in the EU, respectively, according the Spring 2011 Commission Forecast) suggest that the unemployment rate will persist above pre-crisis expected to retrench over the forecast horizon. On average, it will reach 10% in 2011 and then 9.7% in 2012 in the euro area (respectively 9.5% and 9.1% for the EU).

Employment and unemployment evolutions will continue to be much differentiated across Member States in 2011 and 2012 (Table I.4.1). After declining in most of the EU member states in 2010, employment will resume growing in almost all EU countries in 2011 and in all but Portugal in 2012. Although the unemployment rate is declining in most EU countries over the forecast horizon, the prospects remain poor in a number of countries whose labour markets were strongly hit by the crisis and its repercussions to the financial and government sector. This is notably the case of Greece, Ireland, Spain, Portugal. There will be considerable improvements in the Baltic countries, but unemployment rates will remain well above pre-crisis levels. The prospects for unemployment reduction appear also substantial in Germany and Sweden and Finland.

Graph I.4.3: Unemployment developments (left axis) and apparent elasticities of unemployment change to GDP growth (right axis) in the EU countries and in the US in 2011 and 2012

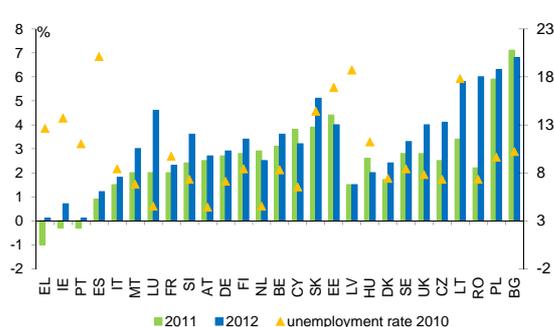


Source: European Commission spring 2011 forecast. Countries are ranked by descending order of unemployment rate in 2010. In 2010, Spain registered the highest unemployment rate in the European Union.

The differences in the forecast unemployment dynamics across countries are mostly linked to the multi-speed recovery, however, in some cases, the unemployment response to growth response is also forecast to differ considerably (Graph I.4.3). While in countries where the recession hit first like the Baltic countries the rebound in unemployment is expected to be large in proportion to GDP growth (in light of adjustment of hours worked having come to an end), in Ireland the unemployment rate is forecast to rise in 2011 in spite of positive growth.

weakness of labour market. Consistently, real wages are expected to decelerate and to grow below productivity; in 2011 and 2012 real product wages are expected to grow in the euro area at about 0.7% both years (for the EU 0.7% and 0.9%) against a productivity growth of 1.2% and 1% for (1.4% both years for the EU). Although the extent of wage moderation will in general reflect labour market slack, the adjustment is expected to be sluggish in Malta, Slovenia, Estonia, Slovakia, Lithuania, Poland and Bulgaria (Graph I.4.4).

Graph I.4.4: Nominal compensation per employee in EU Member States



Source: Commission Spring forecast.

In line with resuming economic growth and rising inflation in 2011, the growth rate of compensation per employee is expected to gradually accelerate in 2011 and 2012 in the euro area to 2.1% and 2.3% respectively (for the EU 2.3% and 2.7%). Wages growth would still be dampened by the continued

Graph I.4.5: Nominal unit labour costs in the euro area



Source: Commission Spring forecasts.

The pick up in compensation per employee of 2011 and 2012 will translate in an increase of unit labour costs for the euro area, partly offset by the increase in productivity, of 0.8% and 1.2% respectively. The strongest dynamics is expected in Bulgaria, Lithuania, Luxembourg and Romania.

Part II

Unemployment benefit systems: reform challenges after the crisis

1. INTRODUCTION

Unemployment benefit systems allow to insure individual incomes during temporary unemployment and provide assistance during longer unemployment periods. While the main purpose of benefits is to provide enough resources for the unemployed to search for adequate job matches, unemployment benefits reduce incentives to work. The underlying reason is moral hazard which induces the sub-optimal job search intensity by the unemployed. Against this, generous and long-lasting transfers to the unemployed can create unemployment traps and benefit dependence, thus entrenching long-term unemployment. Design features help containing the efficiency cost of unemployment benefits, as well as the implementation of effective activation policies and active labour market policies.

Reduced work incentives have macro-economic implications. Unemployment benefits systems that better cope with labour market incentives while supporting the incomes of the unemployed are supporting employment rates and labour supply on a permanent basis, thereby bolstering potential output. Public finances benefit both directly, via reduced expenditures, and indirectly, via an enlarged revenue base to finance fiscal imbalances. Moreover, countries that need to correct on a sustainable basis large current account deficits benefit in terms of increased public and private savings.

EU countries differ considerably in terms of the generosity, composition and design of their unemployment benefit systems. Some countries have traditionally more than others relied on more generous unemployment benefits. Although strengthening labour market incentives is to a large extent a common priority, the desirable and feasible way to achieve this goal differs from country to country in relation to the current features of their unemployment benefit system, the overall context of labour market regulations and institutions, the state of active labour market policies and activation policies, and more generally the economic, employment and fiscal situation.

In addition to providing individual insurance and assistance, the unemployment benefit system also plays the role of macroeconomic stabilisation. It is considered a key automatic stabiliser. Its income stabilisation role can be strengthened by adapting features of unemployment benefit systems over the

cycle. During economic downturns, generosity, design and eligibility conditions of unemployment benefit systems may need to be adapted to cater for the increased job destruction, reduced job finding rates and the stronger need for stabilising incomes. Conversely, during recoveries, the unemployment benefit system needs to prioritise incentives in the labour market with a view to preventing the risk that unemployment becomes structural. Options for this adapting, whether on a discretionary or a more automatic fashion, on the basis of trigger variables, are contingent on the characteristics of countries' unemployment benefit systems and public finances.

This part is organised as follows. Section 2 discusses the efficiency effects of unemployment benefits and the design features to mitigate moral hazard and increase incentives to work. In addition, it outlines the main features of unemployment benefit systems in EU countries and comments upon potential sources of benefit traps and benefit dependency. Section 3 explores the stabilisation function of unemployment benefits and ways to adapt unemployment benefit systems over the cycle. Section 4 reviews main reforms in unemployment benefits carried out in EU countries during the crisis. Finally, section 5 concludes with a discussion of reform options and priorities looking forward.

2. UNEMPLOYMENT BENEFIT SYSTEMS AND LABOUR MARKET INCENTIVES

2.1. THE RELEVANCE OF UNEMPLOYMENT BENEFIT DESIGN FOR INCENTIVES

Most advanced economies dispose of an unemployment benefits system, largely based either on an insurance or welfare principle. The broad goal of unemployment benefit systems is transferring income to involuntary job losers. National systems differ in terms of generosity and composition by instruments. There is no single model as its design depends on other country specific labour market and welfare institutions. Depending on the design of the different instruments and their practice for transferring income to the unemployed, the unemployment benefit system can be rather oriented towards the insurance principle or the welfare principle. The insurance principle aims at consumption smoothing, contributions are the main source of financing, and benefits are strongly related to previous earnings. Conversely, the welfare principle aims at redistributing income, financing is by means of flat-rate contributions or a general tax financing, and benefits are not strongly linked to past income (i.e. benefits are capped at relatively low levels).

The unemployment benefits system is composed of two main instruments: unemployment insurance and unemployment assistance. Unemployment insurance benefits (UI) aim at insuring individual incomes during the unemployment spell and are typically based on an insurance principle. To a varying degree, UI benefits also redistribute between low income/qualification workers with high unemployment risks and high income/qualification workers with low unemployment risks. UI benefits are payable to involuntary job losers that, within a certain reference period, have completed a minimum period of employment or paid contributions. Unemployment assistance (UA) aims at preventing unemployment-related poverty and is based on welfare principle. It is usually paid either to the long term unemployed who have exhausted their UI benefits or to those who failed to qualify for UI benefits. To qualify for UA, the unemployed often do not need to have any employment/contribution period or the required period is shorter than in case of UI benefits.

The financing of unemployment insurance in some countries is based on Unemployment Insurance Savings Accounts (UISA). The principle in this case is not that of insurance but that of individual savings. The account is financed by contributions by the employee and/or the employer and it is earmarked to the particular employment situation of the individual employee. This makes the UISA more fungible compared with standard unemployment insurance schemes. On a positive side, UISA reduces moral hazard in job search efforts and encourages job mobility. On a negative side, UISA does not pool income risks and as a result necessitates additional complementary redistributive policies to provide sufficient coverage to high risk groups unable to accumulate sufficient savings. ⁽²¹⁾

Other institutions and policy instruments perform functions that partly overlap with those of unemployment benefits. The aim of all instruments is to provide income support to the unemployed but the target group and the modality of income support may differ across instruments.

- *Severance payments* provide a similar insurance to involuntary job losers as UI benefits. Yet, their amount is fixed and paid in total upfront by a firm, independently from the duration of unemployment. While a payment independent of the unemployment duration greatly minimises any possible adverse incentive effects on job search compared with UI payments, the uncertainty surrounding the duration of unemployment renders UI clearly superior as an income insurance tool. ⁽²²⁾ Severance payments also increase firing costs and may cause liquidity problems for firms.
- *Short term working arrangements (STWA)* aim at protecting jobs and providing income support in periods of involuntary total or partial inactivity, as result of labour adjustment on the

⁽²¹⁾ Among EU countries, Austria has undertaken in 2002 a reform of its severance pay system which bears some similarities to the UISA.

⁽²²⁾ Baily (1978) argues for a system that combines both UI and redundancy payments. The relative importance of the latter should be higher (lower) depending on the magnitude of adverse incentive effects (the uncertainty surrounding unemployment duration).

internal margin. STWA beneficiaries although inactive remain employed. However, the efficiency of short-time schemes decay quite rapidly when the objective of adjusting the labour input without incurring in mass redundancies conflicts with the need of maintaining an efficient allocation of labour across sectors. Similar as UI benefits, STWA are financed from the UI fund, though the access to STWA is not always conditional on the contributory requirements and does not necessarily reduce potential entitlements to the UI benefits in case of subsequent layoffs. ⁽²³⁾

- *Social assistance* provides benefits of last resort to the unemployed who are either not eligible for unemployment benefits or have exhausted their entitlements to unemployment benefits and to hardly employable beneficiaries outside of unemployment statistics. Social assistance is means-tested and usually financed from the general taxation.

Unemployment benefit systems perform a function of macroeconomic stabilisation. As job finding rate decreases and unemployment duration lengthens unemployment benefits provide an important income and consumption support to the unemployed. Given that the unemployed are likely to spend rather than save their means, unemployment benefits are an important component of automatic stabilisation and are likely to raise aggregate demand in weak phases of the cycle and contain overheating during upturns.

On top of providing insurance, assistance, and macroeconomic stabilisation, unemployment benefits have additional benefits. The purpose of UI benefits is to provide enough resources for the unemployed to search for adequate job matches, not rushing them into unsuitable ones. In this respect, moderately generous UI benefits can improve the quality and productivity of future job matches, thereby increasing total productivity and lengthening job tenure (Acemoglu and Shimer, 1999; Marimon Zolibotti, 1999). Empirical evidence on this effect is mixed.

⁽²³⁾ STWA are more likely to benefit prime age workers and workers with permanent contracts as they are more likely to see their hours worked reduced than young and non-standard workers who are often first to lose their jobs.

The main efficiency cost of unemployment benefits are reduced incentives to work. The underlying reason is moral hazard which induces the sub-optimal job search intensity by the unemployed. Moral hazard becomes distortionary in particular in the context of generous unemployment benefits (e.g. Mortensen, 1997; Shavell and Weiss, 1979). High net replacement rates are usually associated with a high risk of unemployment traps; unemployment traps being defined as cases of low net income gain from taking up work from unemployment. Long benefit duration, in particular if benefits do not fall over the unemployment spell, increases the risk of benefit dependence.

Incentive effects associated with unemployment benefits are empirically significant. Findings from a vast empirical literature corroborate theoretical predictions: more generous UI benefits tend to be significantly associated with higher incidence of unemployment and longer periods in unemployment (e.g. Layard et al., 1991; Nickell, 1998; Krueger and Meyer, 2002); a reduction in the maximum duration of UI benefits is significantly associated to shorter unemployment spells (e.g. Krueger and Meyer, 2002; Van Ours and Vodopivec, 2005; Lalive, 2008; Caliendo et al., 2009). ⁽²⁴⁾ As a rule of thumb, the elasticity of unemployment with respect to unemployment benefit replacement rates in microeconomic studies is estimated to be close to unity (Nickell, 1998; Krueger and Meyer, 2002), with about half of this effect associated to increased unemployment incidence and the other half to increased duration of unemployment (Krueger and Meyer, 2002). The implications of unemployment benefits on the aggregate labour supply from those findings from microeconomic evidence are however not straightforward, as additional effects play a role (e.g. via the job search effort on non-recipient unemployed and the impact of bargained wages due to changed bargaining power of workers).

⁽²⁴⁾ The maximum duration of unemployment benefits has a stronger impact on unemployment duration than replacement rates. An increase in the benefit duration by one week raises unemployment duration by 0.86 weeks in Slovenia (Van Ours and Vodopivec, 2005), by 0.09-0.32 weeks in Austria (Lalive, 2008), by 0.2 weeks in the US (Katz and Meyer, 1990) and by 0.30-0.93 weeks in Czech Republic and Slovak Republic (Ham et al., 1998).

In addition to reduced workers' incentives, unemployment benefits may induce moral hazard behaviour on the part of firms resulting in excessive labour shedding. A generous unemployment benefits system reduces the perceived cost of layoffs by the firm, which may be induced to dismiss workers as a result of imprudent investments or in the presence of temporary rather than permanent demand shortfalls. The inefficiency stems from the moral hazard as firms may not fully internalise the social costs of redundancy decisions. A solution often invoked and practiced in some countries, notably the US, is to structure social security contributions according to "experience rating", with firms having a record of more frequent layoffs paying higher contributions.

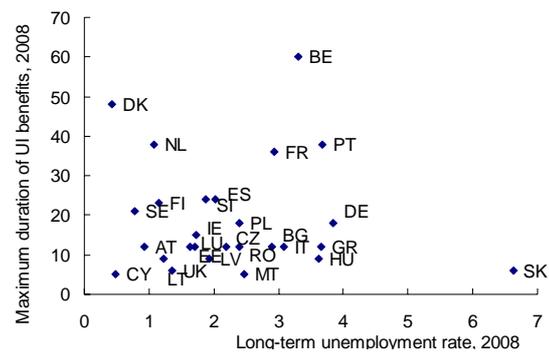
Reduced work incentives have macro-economic implications. Highly distortionary unemployment benefit systems reduce employment rates, the aggregate labour supply, and the potential output on a permanent basis, which also translates into reduced revenues to finance fiscal imbalances. In addition, overly generous and distortionary unemployment benefit systems may contribute to the accumulation of deficits in the external balance as they finance consumption while reducing income, and therefore lowering national savings.

Design features help containing the efficiency cost of unemployment benefits. There is a broad agreement that the following features of unemployment benefit systems help containing job search disincentives:

- A design of the tax and benefit system which ensures that work pays off for all workers categories.
- A duration of unemployment benefits which prevents benefit dependence and long-term unemployment. This is relevant in particular for older workers and workers with long contribution period as they are often entitled to overly long payment of benefits. On aggregate, however, longer duration of benefits is not associated with a higher long-term unemployment rate (Graph II.2.1).
- A profile of benefits over the unemployment spell, which sufficiently falls to keep job search

intensity high. This can be accomplished either by reducing UI benefits after a certain elapsed period in unemployment or introducing less generous UA after the entitlements to UI benefits expire.

Graph II.2.1: Maximum duration of unemployment insurance benefits and long term unemployment



Source: Commission services.

The trade-off between income stabilisation and efficiency can also be eased via the implementation of effective activation policies. Theoretical literature shows that monitoring of job search efforts, job search requirements, and sanctions for inadequate job search are welfare improving and should be an integral part of an optimal UI system (e.g. Boone and Van Ours, 2006, Boone et al., 2007). Empirical research confirms these results, as the evidence shows that the unemployed facing monitoring and modest sanctions are more likely to find a job and exit unemployment (Lalive et al., 2005; Abbring et al., 2005; and Ashenfelter et al., 2005).⁽²⁵⁾

Effective active labour market policies (ALMPs) may also reduce the risk of benefit dependence and reduced incentives. ALMPs target the less employable with a view to have them participating in the labour market. ALMPs mostly consist of:

- Training aiming at improving the employability of the unemployed.
- Measures facilitating taking up work by the unemployed. In this respect, employment

⁽²⁵⁾ The 'threat' of being sanctioned in particular, even if no sanction is eventually imposed, is found to be a very effective deterrent of low job search.

Table II.2.1: Unemployment benefit generosity over the unemployment spell, average wage person, 2009

	Unemployment insurance (UI)						Unemployment assistance (UA) (a)			UI+UA	Social assistance (SA)
	Waiting period, in days	UI NRR (d)	Duration of initial UI NRR, in months (b)	Reduced UI NRR (b) (d)	Final duration, in months	UI generosity over the unemployment spell (c)	Waiting period, in days	UA NRR (d)	Duration, in months	UB generosity over the unemployment spell (c)	SA NRR (d)
	1	2	3	4	5	6	7	8	9	10	11
BE	0	67	12,0	66,7	indefinite	40,0				40,0	34
DK	0	56	-	-	48,0	26,8				26,8	38
PT	0	84	-	-	27,6	23,2	--	32	12 (after UI) or 24	27,1	18
NL	0	74	2,0	69,6	22,0	15,4				15,4	40
FR	8	67	-	-	23,0	15,3	--	24	6 (renewable)	16,7	24
ES	0	60	5,9	60,0	23,7	14,2	--	27	18	19,1	22
FI	7	51	-	-	23,0	11,7	5	20	indefinite (h)	23,5	18
LU	0	84	-	-	12,0	10,1				10,1	38
DE	0	60	-	-	12,0	7,2				7,2	17
SE	5	48	9,2	48,1	13,8	6,6	5	34	14	11,3	16
BG	0	54	5,5	53,6	11,0	5,9				5,9	7
SI	--	65	3,0	64,0	9,0	5,8				5,8	25
RO	0	48	-	-	12,0	5,7				5,7	11
LV (e)	0	84	3,0	62,7	9,0	5,7				5,7	10
EE	--	53	3,3	43,6	11,8	5,5	8	11	9	6,5	10
IE	3	33	-	-	15,0	5,0	3	28	indefinite (h)	22,0	31
AT	0	55	-	-	9,0	4,9	--	51	indefinite (h)	35,3	22
EL (g)	6	38	-	-	12,0	4,6	--	13	9	5,7	--
IT	7	57	6,0	59,0	8,0	4,6				4,6	--
SK	0	64	-	-	6,0	3,8				3,8	10
HU	0	58	3,0	30,7	8,9	3,5	--	24	3	4,3	22
LT	--	68	3,0	48,4	6,0	3,5				3,5	13
PL (f)	7	29	-	-	6-12 months	3,5				3,5	25
CY	4	58	-	-	5,1	3,0				3,0	22
CZ (e)	--	65	2	50	5	2,7				2,7	19
MT	--	36	-	-	5,1	1,8	--	33	indefinite (h)	21,7	34
UK	3	13	-	-	6,0	0,8	--	12	indefinite (h)	8,0	12

UB - unemployment benefits; Countries are ranked by UI generosity per unemployed (column 6)

*Data refer to a single person without children (40 years old with 22 uninterrupted years of contribution period) earning previously average wage.

--" Indicates that no information is available or not applicable.

(a) Applicable only for the countries which operate UA scheme.

(b) Applicable only for the countries with declining profile of UI benefits over the unemployment spell. Note that UI benefits for the average wage person do not decline in some of the EU countries (e.g. in Spain, Bulgaria and Italy) as both UI benefits at the beginning of the unemployment spell and reduced UI benefits are subject to the maximum ceiling on benefits.

(c) UI generosity over the unemployment spell provides info about the available non-discounted total UI benefit amount divided by the wage from work (the average wage).

UB generosity per unemployed is the sum of the UI generosity and the UA generosity, whereby UA generosity provides info about the available non-discounted total UA benefit amount divided by the wage from work (the average wage).

(d) Benefits are shown on an annualised basis.

(e) The Czech Republic and Latvia reduce UI benefits twice over the unemployment spell. Net replacement rates in the Czech Republic are 65 % in the first two months, 50% in the following two months and 45 % in the remaining month while in Latvia they are 84% within the first 3 months, 63% in the following 3 months and 42% in the remaining 3 months.

(f) In Poland UI duration depends on the regional unemployment rate.

(g) In Greece, UA is paid in 3 separate instalments that are spaced out by 3 months. In other words, the instalments are paid three times within the year.

(h) Indefinite duration is assumed to last 5 years when used in the computation of the UI and UB generosity

(i) A declining profile of UI benefits over the unemployment spell applies only for 2009.

Source: Commission services; Joint European Commission-OECD project, using OECD Tax-Benefits models.

incentives refer to subsidies, usually for open market jobs in the private sector, to facilitate the recruitment of the unemployed or help to ensure the continued employment of persons at risk of involuntary job loss. Start-up incentives aim at promoting entrepreneurship by encouraging the unemployed to start their own business or to become self-employed. Supported employment and rehabilitation aim at promoting the labour market integration of persons with reduced working capacity.

- Direct job creation aiming at creating additional jobs, usually of community benefit or socially useful, in order to find employment for the long-term unemployed or persons otherwise difficult to place. Job rotation and job sharing covers measures that facilitate full or partial substitution of an employee by the unemployed for a fixed period.

ALMP require a careful design as the evidence on their effectiveness is mixed (European Commission, 2006; Kluge et al., 2006; Card et al., 2009).

2.2. MAIN FEATURES OF UNEMPLOYMENT BENEFIT SYSTEMS IN EU COUNTRIES

EU countries differ considerably in terms of the generosity, composition and design of their unemployment benefit systems. Some countries have traditionally more than others relied on more generous unemployment benefits. These countries are notably Continental and Nordic countries. Conversely, countries like the UK and some of the EU-12 have traditionally been characterized by less generous unemployment benefits. These differences are mostly linked to different welfare state size and organisation and a different overall institutional set up to support unemployed income.

A snapshot at the generosity, composition and designs of unemployment benefits systems in the

Table II.2.2: Unemployment benefit generosity over the unemployment spell, low wage person, 2009

column	Unemployment insurance (UI)					Unemployment assistance (UA) (a)			UI+UA	Social assistance (SA)	
	Waiting period, in days	UI NRR (d)	Duration of initial UI NRR, in months (b)	Reduced UI NRR (b) (d)	Final duration, in months	UI generosity over the unemployment spell (c)	Waiting period, in days	UA NRR (d)	Duration, in months	UB generosity over the unemployment spell (c)	SA NRR (d)
BE	0	89	12,0	77,3	indefinite	47,8				47,8	53
DK	0	77	-	-	48,0	37,1				37,1	57
PT	0	78	-	-	27,6	21,6	--	39	12 (after UI) or 24	26,2	22
ES	0	78	5,9	68,9	23,7	16,8	--	32	18	22,6	26
FR	8	70	-	-	23,0	16,1	--	32	6 (renewable)	18,0	32
NL	0	76	2,0	72,4	22,0	16,0				16,0	58
FI	7	57	-	-	23,0	13,1	5	25	indefinite (h)	28,3	24
LU	0	82	-	-	12,0	9,8				9,8	47
SE	5	69	9,2	66,5	13,8	9,4	5	43	14	15,4	21
RO	0	64	-	-	12,0	7,6				7,6	15
BG	0	77	5,5	53,8	11,0	7,2				7,2	9
DE	0	60	-	-	12,0	7,1				7,1	26
IE	3	46	-	-	15,0	6,8	3	33,5	indefinite (h)	27,0	37
SI	--	76	3,0	69,9	9,0	6,5				6,5	36
EL (g)	6	47	-	-	12,0	5,7	--	13	9	6,9	
LV (e)	0	83	3,0	61,7	9,0	5,6				5,6	13
EE	--	54	3,3	44,4	11,8	5,6	8	13	9	6,8	12
IT	7	69	6,0	66,1	8,0	5,4				5,4	
PL (f)	7	42	-	-	6-12 months	5,1				5,1	34
AT	0	55	-	-	9,0	4,9	--	51	indefinite (h)	35,3	30
HU	0	73	3,0	40,1	8,9	4,5	--	34	3	5,5	32
LT	--	83	3,0	58,2	6,0	4,2				4,2	16
SK	0	60	-	-	6,0	3,6				3,6	12
CY	4	59	-	-	5,1	3,0				3,0	15
CZ (e)	--	65	2	50	5	2,8				2,8	24
MT	--	48	-	-	5,1	2,4	--	36	indefinite (h)	23,8	36
UK	3	19	-	-	6,0	1,1	--	16	indefinite (h)	10,5	16

UB - unemployment benefits; Countries are ranked by UI generosity per unemployed (column 6)
 *Data refer to a single person without children (40 years old with 22 uninterrupted years of contribution period) earning previously 67% of the average wage.
 "--" Indicates that no information is available or not applicable.
 (a) Applicable only for the countries which operate UA scheme. The calculation of net replacement rates assumes equal UA for low wage and average wage persons in all countries but AT (in AT, UA is not means tested). Therefore, the net replacement rates are likely to be underestimated.
 (b) Applicable only for countries with declining profile of UI benefits over the unemployment spell
 (c) UI generosity over the unemployment spell provides info about the available non-discounted total UI benefit amount divided by the wage from work (67% of the average wage). UB generosity per unemployed is the sum of the UI generosity and the UA generosity, whereby UA generosity provides info about the available non-discounted total UA benefit amount divided by the wage from work (67% of the average wage).
 (d) Benefits are shown on an annualised basis.
 (e) The Czech Republic and Latvia reduce UI benefits twice over the unemployment spell. Net replacement rates in the Czech Republic are 65 % in the first two months, 50% in the following two months and 45 % in the remaining months while in Latvia they are 83% within the first 3 months, 62% in the following 3 months and 42% in the remaining 3 months.
 (f) In Poland UI duration depends on the regional unemployment rate.
 (g) In Greece, UA is paid in 3 separate instalments that are spaced out by 3 months. In other words, the instalments are paid three times within the year.
 (h) Indefinite duration is assumed to last 5 years when used in the computation of the UI and UB generosity
 (i) A declining profile of UI benefits over the unemployment spell applies only for 2009.

Source: Commission services; Joint European Commission-OECD project, using OECD Tax-Benefits models

EU is provided in Table II.2.1 (column 10). Note that the data are updated for 2009 and that, in light of recent reforms, relevant changes may have occurred between the latest update of the tax and benefits database from which the figures are taken and the current situation. In addition, note that the data are shown for the unemployed previously earning the average wage.⁽²⁶⁾ Several features stand out:

- The generosity of the unemployment benefit system to the average beneficiary depends on the net replacement rates and duration of benefits (of unemployment insurance (UI) benefits and, if applicable, on unemployment assistance (UA)). Belgium, Austria, Portugal and Denmark have the most generous unemployment benefits. Conversely, Czech Republic, Cyprus, Poland, Lithuania and Slovakia provide relatively low consumption smoothing to the unemployed (Table II.2.1, column 10).

- Net replacement rates at the beginning of the unemployment spell are high especially in Portugal, Luxembourg and Latvia, standing in stark contrast to low net replacement rates in the UK (Table II.2.1, column 2). Once the entitlements to UI benefits expire, net replacement rates usually decline in all countries, though to a lower extent in the countries operating an UA scheme (Table II.2.1, column 8 and column 11).

- The maximum duration of UI benefits varies widely across the EU countries, spanning from 5 months in the Czech Republic, Malta and Cyprus to indefinite duration in Belgium (Table II.2.1, column 5). Large variation is also observed for UA as its maximum duration ranges from 3 months in Hungary to indefinite duration in Finland, Ireland, Austria, Malta and the UK (Table II.2.1, column 9).

The unemployment trap reduces incentives to accept jobs more for some categories of workers than for others. Table II.2.3 shows that the net

⁽²⁶⁾ The data were also collected for the low wage person, previously earning 67% of the average wage (Table II.2.2).

Table II.2.3: Unemployment traps, 2009

Effective tax rate for an unemployed person (previous work= 67% of the AW level)																														
Family Type	% of AW	BE	DK	DE	GR	ES	FR	IE	IT	LU	NL	AT	PT	FI	SE	UK	CY	CZ	EE	HU	LT	LV	MT	PL	SK	SI	US	JP	BG	RO
	returning to work at a wage equivalent to																													
Single	50%	103	105	83	76	97	86	84	91	104	94	75	101	85	92	57	:	89	76	93	106	107	69	91	80	96	81	91	102	88
	67%	93	89	75	67	81	78	73	79	86	84	67	82	72	76	50	:	79	62	81	86	87	58	75	67	83	68	73	82	73
	100%	81	76	67	62	64	62	61	66	71	71	60	66	62	61	44	:	63	49	72	67	68	51	61	55	69	55	57	62	60
	150%	73	72	63	54	54	55	58	60	63	64	55	57	57	57	41	:	53	40	67	53	56	45	50	46	61	50	48	49	50
1 earner couple	50%	90	90	84	82	96	78	126	90	99	93	83	98	91	100	47	:	92	74	93	106	101	83	73	80	95	81	89	102	86
	67%	82	92	72	71	77	72	100	79	99	91	73	79	86	83	50	:	78	61	82	86	83	65	76	63	87	67	72	82	72
	100%	71	84	64	65	61	61	76	68	74	77	64	60	71	65	44	:	61	48	74	67	66	55	61	47	73	53	55	62	59
	150%	67	75	56	56	51	51	66	61	60	68	58	51	63	60	41	:	51	40	68	53	54	44	51	41	63	45	46	49	50
2 earners couple	50%	87	105	97	91	97	87	58	93	100	89	81	105	77	92	39	:	94	76	93	106	113	61	67	85	96	85	94	102	88
	67%	81	89	85	72	81	77	54	79	83	78	71	85	67	76	37	:	78	62	81	86	92	51	58	71	83	71	75	82	73
	100%	72	74	74	58	64	62	46	66	67	67	62	68	59	61	35	:	63	49	72	67	71	43	49	57	69	57	58	62	60
	150%	68	68	65	51	54	52	46	59	59	61	57	57	55	57	35	:	52	40	67	53	58	40	43	48	61	49	48	48	50
	% of AW																													
	returning to work at a wage equivalent to																													
Single parent, 2 children	50%	96	105	82	88	96	84	55	87	112	83	84	98	89	92	63	:	90	74	93	100	96	81	75	75	95	55	82	102	84
	67%	89	89	85	78	77	81	64	77	87	75	73	80	84	82	72	:	82	61	82	94	79	66	87	63	80	60	70	82	71
	100%	78	79	74	60	61	66	66	70	76	74	64	65	73	69	71	:	70	48	73	72	63	60	73	66	79	55	61	62	59
	150%	72	76	65	59	51	54	61	64	66	66	58	57	64	62	59	:	57	40	68	57	52	49	58	54	69	47	49	49	53
1 earner couple with 2 children	50%	86	92	82	94	96	74	105	87	98	94	93	93	91	100	39	:	91	69	93	100	91	83	75	75	100	47	85	102	82
	67%	79	94	81	82	77	73	96	73	100	85	80	78	93	89	54	:	77	55	81	98	75	66	64	59	84	58	111	82	70
	100%	69	95	72	62	59	66	81	68	82	82	68	59	81	70	61	:	59	45	73	88	60	61	58	44	77	54	82	62	58
	150%	65	85	62	61	50	53	69	63	66	72	61	52	70	64	52	:	53	37	68	68	50	49	50	39	68	47	63	49	52
2 earners couple with 2 children	50%	87	103	102	110	96	86	63	94	105	82	86	104	84	92	52	:	104	76	96	106	113	67	77	85	96	89	94	102	87
	67%	81	91	88	86	79	74	57	81	86	72	75	84	72	76	47	:	86	62	82	86	92	57	64	71	87	74	75	82	73
	100%	72	75	76	65	63	61	48	68	69	63	65	69	62	61	43	:	68	49	74	67	71	47	53	57	71	59	58	62	63
	150%	68	69	66	56	53	51	47	62	61	59	59	57	57	57	41	:	55	40	68	57	58	42	45	48	62	49	47	48	53

Source: Commission services; Joint European Commission-OECD project, using OECD Tax-Benefits models.

income gain from accepting jobs at the beginning of the unemployment spell is in general smaller for low wage workers and workers accepting job offers with lower re-employment wages. This is especially the case in Luxembourg, Latvia and Lithuania and for certain household types, such as one-earner couples and single parents.⁽²⁷⁾ It needs to be stressed that such feature is worrisome in that low income workers are generally at higher risk of unemployment than high wage workers. As the risk of unemployment traps concerns a larger share of unemployed the negative impact on incentives is likely to be more pervasive.

The risk of unemployment traps for particular workers' categories is shaped to a relevant extent by the design of net replacement rates. UI benefits are usually set on the basis of previous earnings. Yet, in almost all countries there is a minimum floor to benefits to protect workers with very low earnings and a maximum ceiling.⁽²⁸⁾ These two

ceilings differ considerably across the EU countries and can substantially narrow the range of earnings which give right to UI benefits as a proportion of previous earnings (Table II.2.4).

These ceilings on benefits also lead to a large variation in net replacement rates, with higher net replacement rates for low wage persons and lower net replacement rate for high wage persons. In this respect, an UI benefit system which incorporates a strong redistribution component and sets a high minimum floor on benefits is prone to generate disincentives to work for low-wage persons.

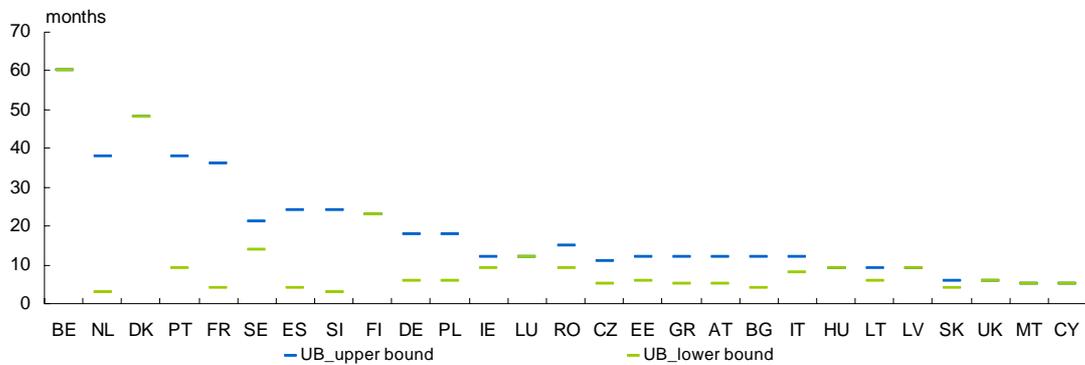
Conversely, an UI benefit system with a strong link of UI benefits to past income can lead to high net replacement rates also for higher wage persons (e.g. Portugal, Latvia and Luxembourg). Finally, the risk of unemployment traps depends also on eligibility rules for unemployment benefits.⁽²⁹⁾ If not eligible for UI benefits, the unemployed without sufficient means can typically draw either on UA or SA, which are usually associated with lower net replacement rates and higher job search incentives.

⁽²⁷⁾ In Lithuania, a high unemployment trap for the low wage person stems from a very high net replacement rate at the beginning of the unemployment spell (83%, Table II.1.2, column 2). Yet, Lithuania is ranked among the countries with the least generous UB systems as unemployment benefits strongly decline after 3 months of elapsed unemployment and are completely withdrawn after 6 months.

⁽²⁸⁾ Ceilings on unemployment benefits are absent in those countries which operate flat or nearly flat rate unemployment benefits (the UK, EL, PL, MT and IE).

⁽²⁹⁾ Net replacement rates also depend on the employment record/contribution period (DK, LV, PL and RO), family composition (DE, CY and MT), worker's occupation – white or blue collar (EL) and age (UK).

Graph II.2.2: Minimum and maximum unemployment insurance benefit duration, 2009



Source: Commission services; Joint European Commission-OECD project, using OECD Tax-Benefits models.

Table II.2.4: Threshold values for minimum and maximum unemployment benefits, 2009

Country code	Threshold for minimum UI benefits (in terms of previous earnings, as % of AW)	Threshold for maximum UI benefits (in terms of previous earnings, as % of AW)
AT	no minimum floor	113
BE	40	65
BG	35	71
CY	no minimum floor	above 200
CZ	no minimum floor	117
DE	no minimum floor	above 200
DK	50	63
EE	35	above 200
ES	34	77
FI	21	above 200
FR	no minimum floor	above 200
EL	flat rate UI	flat rate UI
HU	35	71
IE	nearly flat rate	nearly flat rate
IT	no minimum floor	84
LT	18	88
LU	no minimum floor	132
LV	no minimum floor	above 200
MT	flat rate UI	flat rate UI
NL	38	108
PL	flat rate UI	flat rate UI
PT	45	136
RO	26	above 200
SE	28	62
SI	28	86
SK	no minimum floor	above 200
UK	flat rate UI	flat rate UI
US	27	84

(1) Example: in Denmark workers with previous earnings up to 50% of the average wage (the amount which is close to the minimum wage) receive flat rate minimum UI benefits while workers with previous earnings above 63% of the average wage receive flat rate maximum UI benefits. Only those workers with previous earnings in the range between 50% and 63% of the average wage receive UI benefits as a proportion of previous earnings. Threshold values are presented for a single person without children.

Source: Commission services; Joint European Commission-OECD project, using OECD Tax-Benefits models.

As stressed above, the duration of unemployment benefits is key for the emergence of benefit dependence. The practice in EU countries regarding UI benefit duration differs considerably. About one third of the EU countries sets benefit

duration uniformly regardless of worker's characteristics and in some cases very long which accentuates the risk of benefit dependency (e.g. in Denmark, Belgium and Finland).

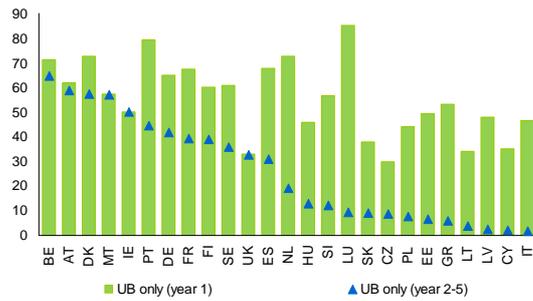
Conversely, other countries set benefit duration according to worker's characteristics.⁽³⁰⁾ The gap between the shortest and the longest UI benefit duration may reach 35 months in the Netherlands and about 30 months in France and Portugal (Graph II.2.2). UI benefit duration is often shorter for younger and temporary workers with a shorter contribution period while substantially longer for older workers with a long contribution period. While the former group is at risk of insufficient coverage, the latter group is at high risk of benefit dependence (e.g. in the Netherlands, Portugal, France, Spain and Slovenia), which is in some countries further entrenched by UA available to the unemployed once their entitlements to UI benefits expire.⁽³¹⁾ The risk of benefit dependence is large in particular with time-unlimited UA (in Finland, Ireland, Austria, Malta and the UK). Long unemployment benefits and generous net replacement rates, however, do not necessarily cause benefit dependence as they can be effectively offset with well-designed activation

⁽³⁰⁾ The maximum duration can depend on age (CZ, IT), family status (PL, SE), previous employment duration – based on the employment record/contribution period (BG, EE, ES, HU, MT, NL and RO) or on the employment record/contribution period and age (DE, EL, FR, IE, LT, LU, AT, PL, PT, SI) – contracts type (SK), local labour market conditions (PL), and participation in training (AT).

⁽³¹⁾ The risk of benefit dependence of older workers further increases if unemployment benefits overlap with early retirement programmes and sickness and disability benefits.

policies and strictly enforced job search conditionality.

Graph II.2.3: Net replacement rate of unemployed over the unemployment spell (unemployment benefits only), 2009



(1) Unemployment benefits (UB) include unemployment insurance benefits and unemployment assistance. Net replacement rates (NRR) show averages over four different family types and two earnings levels (67% and 100% of average full-time wages). They are evaluated for a prime-age worker (aged 40) with a long and uninterrupted employment record. NRR include cash incomes (excluding, for instance, employer contributions to health or pension insurance for workers and in-kind transfers for the unemployed), income taxes and employees' social security contributions. Unemployment benefits are shown on an annualised basis.

Source: Commission services; Joint European Commission-OECD project, using OECD Tax-Benefits models.

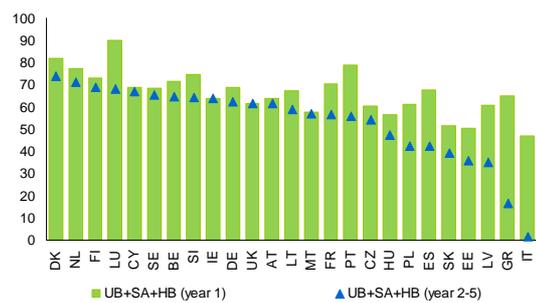
The additional relevant feature for benefit dependence and for job search intensity is the extent to which benefits fall over the unemployment spell. Countries attempt to fight benefit dependence not only by limiting benefit duration but also by gradually reducing net replacement rates over the unemployment spell. This is done either by reducing UI benefits over time or introducing less generous UA once the entitlements to UI benefits expire.⁽³²⁾ Overall, the risk of benefit dependency is lower in countries with a large gap between the net replacement rates

⁽³²⁾ Only 4 countries have both a declining UI profile and flat UA, which suggests that these instruments can be used alternatively to increase job search incentives. Only 7 EU countries do not reduce unemployment benefit replacement rates over the unemployment spell. The effective reduction of UI benefits usually depends on the minimum floor and the maximum ceiling on benefits, which often prevent full reduction of net replacement rates for workers with either very low earnings or higher earnings. For example, despite a declining profile of UI benefits in Spain, Bulgaria and Italy, net replacement rates do not change over the unemployment spell for the average wage person. This is so because UI benefits are subject to the maximum ceiling on benefits and as long as the benefit is above the ceiling it cannot be reduced.

in the first year of the unemployment spell and the net replacement rates in the remaining years in unemployment (e.g. in Luxembourg and the Netherlands as shown in the Graph II.2.3).

Conversely, risk of benefit dependency is large in the countries where replacement rates for unemployment insurance with long duration do not fall sufficiently (e.g. for all workers in Denmark and Belgium and for workers with long contribution period in Portugal, the Netherlands and France) and in the countries setting flat UI benefits and time-unlimited UA of the same amount (e.g. in Malta, Ireland and the UK). In the later case, the risk of benefit dependence is large in particular for low wage workers. To some extent, benefit dependence may also be related to social assistance and other means-tested benefits, paid either as a top up to unemployment benefits or as an income replacement once unemployment benefits are exhausted, to the extent that it flattens the profile of net replacement rates over the unemployment spell (Graph II.2.4). In this respect, also the family composition, notably the presence of children and the work status of the spouse, shapes net replacement rates.

Graph II.2.4: Net replacement rate of unemployed over the unemployment spell (unemployment benefits topped up with social assistance and housing benefits), 2009



(1) UB – unemployment benefits; SA – social assistance; HB – housing benefits; For the explanation of net replacement rates see the comment to the Graph II.2.3.

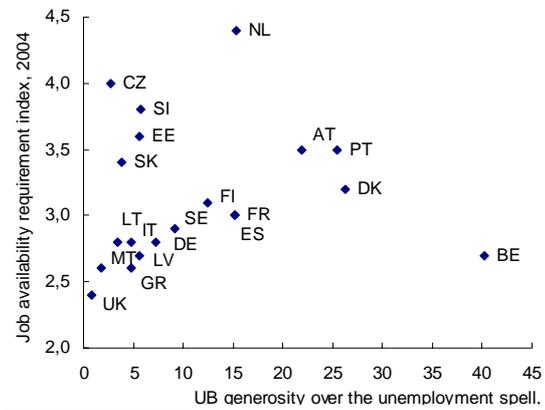
Source: Commission services; Joint European Commission-OECD project, using OECD Tax-Benefits models.

To ease transition into work and reduce benefit dependence, most countries allow earned income to be supplemented with benefits when taking up work (so-called employment-conditional benefits). Although benefits can be combined with income from work, employment-conditional UI benefits

are often subject to restrictions inter alia on the amount of earnings (e.g. in the Czech Republic, Austria, Cyprus and Luxembourg) and hours worked (e.g. in Finland, France, Germany, the Netherlands and Portugal). In this respect, once taking up work, the benefits paid are usually reduced either by days or hours worked or proportionally to earnings. Earnings disregards are not permitted, e.g. in Lithuania and Latvia, meaning that UI benefits are fully withdrawn once a person receives any earnings from work. Earnings can be accumulated also with UA, up to a certain threshold (except in Hungary, Portugal and Spain), after which they are withdrawn completely (e.g. Austria) or reduced (e.g. France and the UK).

The implications of generosity, duration and design of unemployment benefit needs to be assessed taking into proper account also the presence and effectiveness of activation policies. Nearly all countries require the unemployed to be registered at the employment office and be available for work. Activation strategies aim at supporting the unemployed during their job search and at controlling the moral hazard induced by the payments of benefits to the unemployed. As expected, the correlation between the generosity of unemployment benefits and an indicator measuring the strictness of the job availability requirements is positive, although weak (Graph II.2.5).

Graph II.2.5: **Net replacement rate and activation strategies**



(1) UB generosity over the unemployment spell is calculated as in the Table 1, footnote c. Job availability requirement index is a summary indicator of the strictness of the availability criteria. A higher value means greater strictness. Søren Hasselpflug (2005): "Availability criteria in 25 countries", Danish Finance Ministry Working Paper, 12, 2005. The index refers to 2004 and is expected to be updated in 2011 within a Joint European Commission-OECD project.

Source: Commission services.

Despite legislation for activation policies is present in most EU countries, relevant differences exist in terms of enforcement of work-availability criteria as employment offices do not have adequate resources or effective mechanisms for monitoring and enforcing the obligations of benefit recipients in terms of job search effort and ALMPs.

3. UNEMPLOYMENT BENEFITS AND INCOME STABILISATION

3.1. THE INCOME SMOOTHING PROPERTIES OF UNEMPLOYMENT BENEFIT SYSTEMS

There is broad agreement that automatic stabilisers perform a relevant stabilisation role if properly developed and are superior in several respects compared with discretionary fiscal stabilisation. Automatic stabilisers are usually defined as those elements of fiscal policy which mitigate output fluctuations without discretionary government action. They help to reduce the severity of a recession by automatically and timely supporting spending during a downturn. Conversely, discretionary fiscal stabilisation can be subject to recognition, decision, and implementation lags given that it takes time to identify the start of recession, to decide upon action, enact legislation and implement it. Uncertainty about real time business cycle developments and the risk that policy makers' incentives are not consistent with output stabilisation further reduce the effectiveness of discretionary fiscal stabilisation.

Measuring the smoothing impact of automatic stabilisers is subject to a series of difficulties and the estimates based on macroeconomic data differ in magnitude depending on the estimation approach chosen. The range of fiscal multiplier estimates is large in the literature, spanning from less than zero to larger than four (Spilimbergo et al., 2008). The size of these estimates typically depends on the type of the fiscal stimulus and the selected approach, e.g. whether it is econometrics based (e.g. Gali, 1994; Fatas and Mihov, 1999) or model based (Van den Noord, 2003, Buti et al., 2003). Estimates are heterogeneous also across countries, albeit there is some evidence that countries with bigger governments tend to have larger automatic stabilisers (e.g. Baunsgaard and Symansky, 2009).

There is substantial agreement that unemployment benefits are effective components of automatic stabilisers. The reason is that unemployment benefits provide consumption means to the unemployed which tend to be low-income and liquidity-constrained and often concentrated in the areas and industries that have been the most affected by downturn. The share of credit constrained households augments and the insurance value of benefits increases in particular during recessions, when the job finding rate

decreases and unemployment duration increases. In this respect, unemployment benefits support aggregate demand for goods and services during downturns and dampen inflationary pressures during expansions. Apart from stabilising income, UI systems help to sustain confidence of workers and reduce precautionary savings. In light of the timely, targeted and temporary nature of UI benefits as automatic stabilisers, a greater provision of UI benefits was often suggested as an effective stimulus aimed at consumers at the beginning of the crisis in 2008 (e.g. Spilimbergo et al., 2008).

Table II.3.1: **Income stabilisation in case of unemployment shock, 2008**

	Income stabilisation (% of shock absorption)				
	FEDTax	StateTax	SIC	BEN	TaxSicBen
AT	16,3	0,0	17,1	25,2	58,5
BE	24,0	0,0	12,3	24,9	61,2
DE	20,9	0,0	14,5	26,9	62,4
DK	11,6	0,0	9,2	61,5	82,3
EE	17,3	0,0	2,3	3,6	23,3
EL	9,3	0,0	15,0	7,9	32,2
ES	12,4	0,0	6,8	18,4	37,6
EU25	15,6	0,0	12,4	18,8	46,9
EA	15,0	0,0	13,3	20,2	48,5
FI	22,1	0,0	4,9	24,8	51,9
FR	7,5	0,0	19,0	30,3	56,8
HU	20,3	0,0	19,1	7,3	46,7
IE	17,8	0,0	3,6	17,3	38,7
IT	16,4	0,0	10,5	4,2	31,1
LU	12,7	0,0	8,0	38,7	59,3
NL	10,4	0,0	17,1	17,8	45,2
PL	13,4	0,0	16,6	3,0	32,9
PT	14,6	0,0	9,7	14,3	38,6
SE	19,9	0,0	2,7	45,2	67,8
SI	15,2	0,0	22,1	7,3	43,1
UK	19,1	0,0	6,1	16,3	41,5
US	17,4	4,1	5,1	7,1	33,7

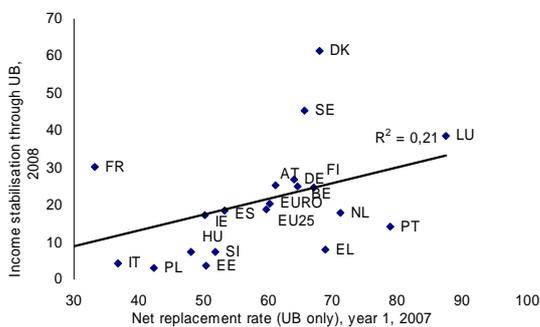
Source: Eichhorst et al., 2010; Unemployment shock refers to an increase in the unemployment rate by 5 pps. FEDTax – federal taxes; StateTax – state taxes; SIC – social insurance contributions; BEN – unemployment benefits; FEDTax data for the US include also the state taxes.

Recent estimates of the automatic stabilisation impact of unemployment benefits are based on micro data. According to a study by Eichhorst et al. (2010) automatic stabilisers absorb 47% of an unemployment shock in the EU against only 34% in the US with social transfers (in particular unemployment benefits) having the highest income stabilisation contribution (19% in the EU and only 7% in the US) (Table II.3.1). ⁽³³⁾

⁽³³⁾ The automatic stabilisation depends on the characteristics of the tax and benefits system, in particular the tax and benefit levels, which determine the change in disposable income of households experiencing transition from employment to unemployment. In this respect, automatic

These results suggest that differences in the characteristics of the unemployment benefits imply different effectiveness of benefits as automatic stabilisers. Unemployment benefits as automatic stabilisers tend to be considerably stronger in Northern and Continental European countries than in the NMS and Southern European countries.

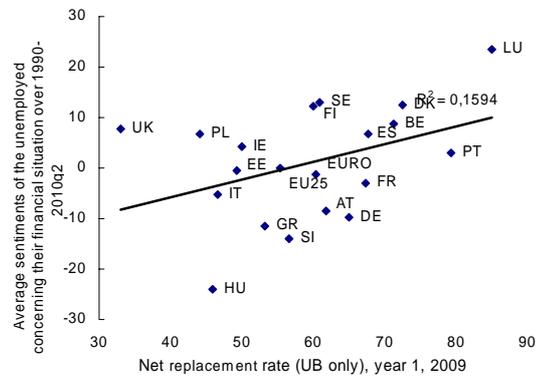
Graph II.3.1: Net replacement rates and income stabilisation



Source: Commission services. UB – unemployment benefits. Data on income stabilization through UB are from Eichhorst et al. (2010) and provide information about the % of unemployment shock absorbed by UB. For the explanation of net replacement rates see the comment to the Graph II.3.2.

Replacement rates appear to be positively associated with the smoothing impact of unemployment benefits and with sentiment of the unemployed concerning their own financial situation. Graph II.3.1 demonstrates a positive correlation between net replacement rates and capacity of unemployment benefits to stabilise income, thus confirming expectations that higher net replacement rates help to stabilise income of the unemployed. In addition, by smoothing consumption, higher net replacement rates help to support sentiments of the unemployed concerning their financial situation, including during cyclical downturns.

Graph II.3.2: Average sentiments of the unemployed and net replacement rate



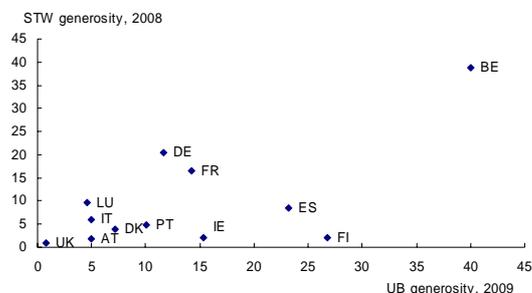
(1) UB – unemployment benefits. For the explanation of net replacement rates see the comment to the Graph II.3.1. As regards the average sentiments of the unemployed concerning their financial situation, the corresponding question in the consumer survey reads as follows: "How has the financial situation of your household changed over the last 12 months?" The answer scheme is qualitative according to a five-option ordinal scale. Aggregate balances are calculated as the difference between positive and negative answering options, measured as pps of total answers. Balance values range from -100, when all respondents choose the most negative option, to +100, when all respondents choose the most positive option. Average sentiments of unemployed concerning their past financial situation are obtained from the panel data of 25 EU countries over the period 1990Q1-2010Q2 and are demonstrated by country specific effects.

Source: Joint European Commission-OECD project, using OECD Tax-Benefits models and EU Consumer Survey

Evidence on EU countries over the period 1990-2010 suggests that sentiments of the unemployed concerning their financial position are on average higher in countries with higher net replacement rates (Graph II.3.2). In addition, in some countries the generosity of unemployment benefits and the generosity of short time working schemes are substitute instruments for consumption smoothing (Graph II.3.3).

stabilisers can also be interpreted as the average effective tax rates resulting from taking up a job from unemployment.

Graph II.3.3: **Generosity of short-time working schemes and unemployment benefits**



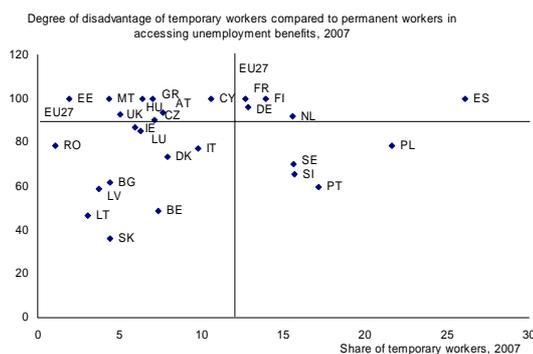
Source: Commission services. STW – short time work; UB – unemployment benefits. UB generosity over the unemployment spell is calculated as presented in the Table 1, footnote c; STW generosity is calculated as the product between the net replacement rate and the maximum duration of short time work (in months) - see Arpaia et al., 2010.

The income smoothing property of unemployment benefit systems depends not only on their generosity but also on the composition by instrument and design. The income protection and stabilisation property of unemployment benefits to a large extent depends on the parameters of the unemployment benefit system which determine the effective coverage, i.e. the share of jobless people who are receiving unemployment benefits. These parameters are:

- *Duration of benefits.* Longer duration of UI benefits and/or availability of UA on top of expired UI benefits ensure that stabilisation function is preserved in protracted recessions.
- *Entitlement criteria.* Relaxed entitlement criteria help to stabilise income of a larger share of unemployed, including those with shorter contribution period, such as young and temporary workers, who are usually at higher risk of unemployment. In addition, extending the coverage of unemployment benefits to non-standard workers can also strengthen their incentives to take up work. Eligibility conditions for non-standard workers has become increasingly relevant in light of the tendency towards a wider use of fixed-term and atypical contracts. Graph II.3.4 and Graph II.3.5 provide insight on the degree of disadvantage of temporary and self-employed workers compared to permanent workers in accessing unemployment benefits across EU

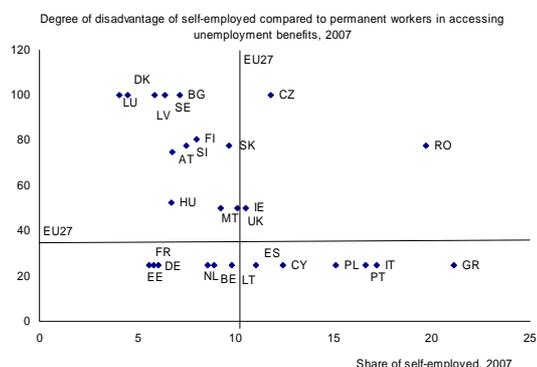
countries, both in terms of eligibility and value of benefits received. ⁽³⁴⁾

Graph II.3.4: **Access of temporary workers to unemployment benefits**



Source: Commission services, Alphametrics (2009); A degree of disadvantage of 100 implies that temporary workers are entitled to the same unemployment benefits as permanent workers. A value of this indicator below 100 implies a higher degree of disadvantage of temporary workers compared to permanent workers.

Graph II.3.5: **Access of the self-employed to unemployment benefits**



(1) Alphametrics (2009); A degree of disadvantage of 100 implies that the self-employed are entitled to the same unemployment benefits as permanent workers. A value of this indicator below 100 implies a higher degree of disadvantage of the self employed compared to permanent workers.

Source: Commission services.

⁽³⁴⁾ In some countries employees must have been employed for at least 4 months in the past 6 months to be entitled for unemployment benefits, implying that workers with short contracts are not covered. Moreover, although eligible to receive unemployment benefits, the value of benefits received by temporary workers may be lower due to shorter duration of payments.

3.2. ADAPTING THE GENEROSITY OF UNEMPLOYMENT BENEFITS OVER THE CYCLE

There are several reasons for adapting generosity and eligibility conditions of unemployment benefit systems. Changes in the eligibility criteria during downturns help to operate income transfers towards a growing pool of unemployed, with a view to obtain a more effective cyclical stabilisation. The adaptation of eligibility is required also on the basis of changing composition of the pool of the unemployed, as in downturns a greater share of unemployed is likely to have short work history and then no entitlement to benefits. On the side of generosity, more generous benefits in downturns are justified not only because of stronger stabilisation needs but also because of weaker disincentive effects (e.g. Andersen and Svarer, 2009; Kiley, 2003; Sanchez, 2008). The risk of unemployment hysteresis (e.g. associated to loss of skill during unemployment) is lower in downturns as the share of long term unemployment falls. Moreover, job search effort is less distorted by the presence of benefits when the job finding rate is low, which is typically the case during downturns. Symmetrical arguments apply to recoveries.

The adaptation of the unemployment insurance benefit system may also require sufficient fiscal space in downturns. The reason is that unemployment benefit expenditures are highly countercyclical. In this respect, during large and protracted recessions the collected contributions may not be sufficient to cover the cost of unemployment transfers, thus calling for either larger contributory rates or reduced transfers. Conversely, when the cycle is particularly strong, the reduction in the number of unemployment benefit recipients may justify a reduction in contributory rates or more generous transfers. To ensure stable financing of the unemployment insurance benefit system, its design may need to be adapted in such a way that savings during good times would create sufficient fiscal space for higher expenditures in bad times.

The adaptation of the unemployment benefit system over the cycle may take place as a result of discretionary decisions by policy makers or in light of automatism set in the legislation. In the former case, the increase or reduction in unemployment benefit generosity requires new legislation to be proposed by government and approved by Parliament. When the adaptation is automatic instead, the revision in eligibility conditions, replacement rates and duration is the outcome of already existing legislation that defines ex-ante the conditions under which this revision will have to take place. Those conditions normally consist of trigger variables (representing the state of the economic cycle) and associated changes in relevant unemployment benefits parameters.

The choice of trigger variables and associated changes matters considerably for a successful implementation of automatic rules for unemployment benefits. Setting a trigger variable requires first a choice about a suitable economic indicator(s), which should ideally move in tandem with labour market conditions, thus reflecting timely underlying job finding conditions (e.g. Schwartz, 2008). It also requires setting criteria for automatic rules to turn on or off, usually defined in terms of the level or a relative change of the indicator. The Box II.3.1 on trigger variables summarises positions found in the literature.

In practice, the use of sophisticated trigger variables proves problematic. In light of imperfect timeliness of relevant statistics and possible interpretation and communication difficulties it is difficult to choose an appropriate economic indicator which also captures timely the precise underlying labour market developments and job finding conditions.

An additional difficulty is posed by the potential persistency of the indicator which may prevent automatic rules to turn on or off. In practice, however, the choice of a trigger variable is simpler than proposed in the literature as shown by US experience (see Box II.3.2).

Box II.3.1: Proposed trigger variables in the literature

In the US the generosity of the unemployment benefits is automatically adjusted over the business cycle on the basis of trigger variables. The literature has made different proposals for these variables.

Schwartz (2008) proposed a trigger designed on the basis of the average duration of unemployment spells using a Markov Switching model to identify cyclical phases in the labour market. Benefits are extended in each quarter following a period of recession, defined as a period of high rates of exhaustion of UI benefit and low job finding probabilities. The duration is brought to the standard one, after one quarter following a recovery.

Wenger and Walters (2006) suggest two triggers. A broad trigger requires an increase in the unemployment rate by 20% over the previous two years to activate the extension. This extension is reversed when the unemployment rate has returned to the level of the previous year. The trigger that turns off the automatic extension is increased annually by 10% to avoid benefits being paid for too long as unemployment becomes persistent. Alternatively, a narrow trigger requires a larger increase in the unemployment rate – i.e. by 25% over the previous two years - to activate the extension of benefits and faster reversal to previous duration. The threshold level of the unemployment rate which brings duration back to normal is increased over the following years, so that periods of persistent unemployment are not accompanied by too long benefit duration.

Recently, Wenger and Boushey (2010) proposed a two-tier trigger system for the US. The first-tier extends benefits by 20 weeks when the state unemployment rate is at or above an average of 6.5% over a period of three-months or when it increases by 20%. The extension is withdrawn when state unemployment rate falls below an average of 6.5% over a three-month period and when the number of persons claiming UI returns to pre-recession level. If state unemployment rate rises above an average of 8.5% over a three-month period, the second tier is activated and benefits are automatically extended by additional 13 weeks (on top of 20 weeks from the first tier). The second tier turns off when state unemployment rate falls below an average of 8.5% over a three-month period. These policy triggers, however, risk of staying activated for too long if the unemployment rate gets persistent.

Overall, there are pros and cons from an automatic adaptation of unemployment benefit generosity over the cycle.

- On the one hand, an automatic adaptation: (i) permits to obtain a more predictable system; (ii) reduces the risk of hysteresis in unemployment benefit generosity as a result of the constitution of interest group; (iii) prevents the risks associated with decision and implementation lags for enacting new legislation.
- On the other hand, automatic systems: (i) may lack credibility if automatic increases in generosity are likely to clash with budgetary objectives; (ii) require a careful design to be effective and sustainable without revisions; (iii) additional discretionary legislation may in any case be need to adapt unemployment benefits in light of structural reforms in the labour market, welfare, and taxation fields.

Box II.3.2: Unemployment benefits system in the US

In the US, each state administers its own UI benefit system, setting state taxation rules, eligibility criteria, level and duration of benefits. The benefit system allows for the adjustment of benefit generosity over the cycle on the basis of a three-tiered process:

- The regular unemployment benefit program provides regular unemployment benefits available for up to 26 weeks.
- The temporarily extended benefit program provides income support once regular benefits expire, up to additional 13 or 20 weeks, on the basis of automatic rules set with respect to the state's insured unemployment rate, defined on the basis of the 13-weeks moving average of the UI beneficiaries as a percentage to the total number of insured workers in the first four of the last six quarters. The level of extended benefits remains identical to those under the regular program. Extension of benefits is financed by both the state and the federal governments equally.
- The temporary supplemental benefit program provides additional income support after the entitlements to regular and extended benefits are exhausted on the basis of an act legislated by the Congress. The level of benefits is identical to those under the regular and extended program while benefit extension is entirely financed by the federal government.

Not only the generosity but also the design of unemployment benefits needs to be adapted over the cycle. In particular, while in downturns the system needs to be designed in such a way to maximise its income stabilisation function, during economic recoveries the priority becomes that of minimising benefit dependence and fostering incentives. In this respect, it is during recoveries that avoiding excessive duration of benefits, ensuring a declining profile of transfers and strengthening activation policies becomes even more important.

Existing literature suggests a reduction in benefit duration and more rapid decline of replacement rates over the unemployment spell during cyclical upswings (Sanchez, 2008 and Kiley, 2003). In addition, some analysis advocate lower net replacement rates at the beginning of the unemployment spell on the account of higher probability of finding a job (Kiley, 2003).

4. UNEMPLOYMENT BENEFIT REFORMS DURING THE CRISIS

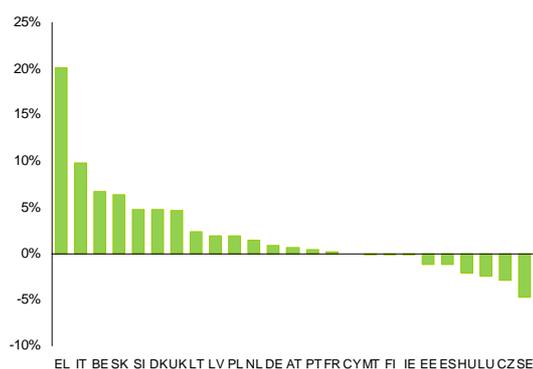
Most countries reformed their unemployment benefit systems with a view to strengthen the automatic stabilisers and support aggregated demand. Loosening the eligibility rules to increase the coverage of unemployment benefits, most notably for short-tenured displaced workers, increasing the replacement rates at the beginning of the unemployment spell and extending benefit duration were among the main measures that contributed to support income and consumption of jobless people. Countries with more generous unemployment benefits made fewer adjustments to the parameters of the system than countries with less generous benefits (Table II.4.1).

Regarding eligibility, several countries extended the coverage of unemployment benefits to workers with short-employment history, in most cases on a permanent basis. ⁽³⁵⁾ Several countries took measures to reduce the impact of the crisis on future entitlements, *inter alia* counting the period of parental leave in the employment record (Slovakia), removing the waiting period requirement for receiving benefits (Spain until 2009 and the UK) or temporarily doubling the contribution period in the unemployment insurance fund (Sweden and the UK). To extend coverage, individuals with short spells of unemployment were allowed in Portugal, Spain and Slovakia to receive benefits without losing the eligibility to benefits for frequently losing a job.

Unemployment benefits were raised, in particular at the beginning of the unemployment spell in Belgium, the Netherlands, Bulgaria, Czech Republic and Poland (Graph II.4.1). Unemployment benefits were also increased in Latvia and Finland, regardless of the length of the unemployment spell. To avoid a fall of benefits following the downward wage adjustment due to the crisis, ad hoc adjustments were made in Latvia

and Finland to the reference wage used to compute the unemployment benefits. ⁽³⁶⁾

Graph II.4.1: **Change in net replacement rates (unemployment benefits only) in the first year of unemployment over the period 2007 and 2009**



(1) For the explanation of net replacement rates see the comment to the Graph II.3.1. The net replacement rates may change when unemployment benefits are modified or when taxes on earnings are modified more or less than taxes on benefits.

Source: Commission services; Joint European Commission-OECD project, using OECD Tax-Benefits models.

Owing to the leveraged fiscal position, Lithuania reduced the amount of maximum benefit but increased the fixed part of UI benefits. Lump sum payments were given to the unemployed not qualifying for unemployment benefits (in Italy a one-off payment of 30% of previous income with a ceiling of 4000 € was given to displaced workers previously employed with a *project contract work*) or having exhausted their benefit entitlements (in Greece, France and Spain).

The duration of the benefits was raised in Romania, Latvia and Finland – Graph II.4.2 and Graph II.4.3. ⁽³⁷⁾ Conversely, the duration was

⁽³⁵⁾ The work requirement for eligibility to unemployment benefit was reduced in Finland (from 43 to 34 weeks during the preceding 28 months), in Portugal (from 450 to 365 days during the preceding 24 months), in France (from 6 months during the last 22 months to 4 months during the last 28 months), in Latvia (from 9 months during the previous 12 months to 12 months during the previous 18 months) and in Slovenia (from 12 months during the last 18 months to 9 months during the last 24 months from 2011 onwards).

⁽³⁶⁾ In Finland, unemployment benefits are based on pre-crisis salaries; in Latvia, the period relevant for the calculation of unemployment benefits was extended from 6 to 12 months. In addition, in Finland, the increase in the replacement rate is small as it concerns only those on the "Change Security" system. In situations of mass dismissals and company closure, this system gives the right to the employees to individual programmes or re-employment or re-education, free time for job searching and counselling while still on the job and higher levels of benefits in the transition period.

⁽³⁷⁾ In 2009, the duration of unemployment benefits was increased by 3 months for some categories of the unemployed in Latvia to 9 months for all unemployed regardless of the insurance period in Latvia (previously duration was dependent upon the social insurance record).

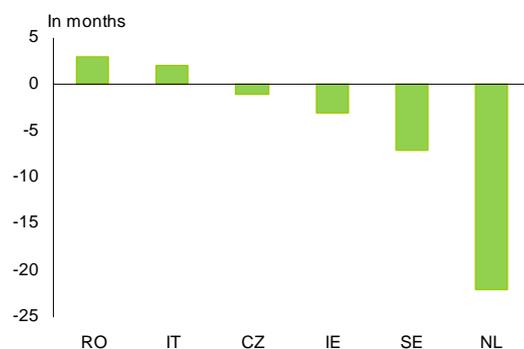
Table II.4.1: Policy measures in EU countries, 2008Q2 – February 2010

	UI and UB generosity for a single average wage person (22 years of contribution history)		UB coverage (b)	Policy measures as regards UB coverage and generosity of UI benefits + lump sum payments to unemployed							
	UI generosity over the unemployment spell (a)	UB generosity over the unemployment spell, UB=UI+UA (a)		UB coverage		UI duration		Replacement rate		Lump sum payments to unemployed	
				Policy measure	Generosity	Policy measure	Generosity	Policy measure	Generosity	Policy measure	Generosity
BE	34,13	34,13	92					x	+		
DK	27,23	27,23	110								
PT	23,26	27,15	67	x	+						
FR	15,29	16,71	103	x	+					x	+
NL	13,15	13,15	126					x	+		
ES	13,04	18,03	70	x	+					x	+
FI	11,96	23,97	89	x	+/-	x	+	x	+		
LU	10,18	10,18	50								
SE	7,31	12,08	154	x	+						
DE	7,13	7,13	133								
EE	5,43	6,43	65								
SI	5,03	5,03	25	x	+						
AT	4,94	37,47	90								
LV	4,77	4,77	52	x	+	x	+	x	+		
IE	4,28	21,12	94	x	-	x	-				
IT	3,96	3,96	--	x	+/-						
SK	3,87	3,87	33	x	+						
PL	3,59	3,59	14			x	-	x	+		
HU	3,17	3,89	33								
CY	2,99	2,99	78								
LT	2,99	2,99	27	x	-	x	+	x	+/-		
GR	2,93	4,15	55					x	+	x	+
CZ	2,85	2,85	30			x	-	x	+		
MT	1,90	21,89	155								
UK	0,74	8,12	100	x	+						
BG			22					x	+		
RO			42			x	+				

Source: Source: Commission services, Joint European Commission-OECD project, using OECD Tax-Benefits models; EC/OECD Questionnaire on Employment and Social Policy in the Economic downturn; "+" indicates an increase in generosity; "-" indicates a reduction in generosity; "+/-" indicates that both measures to increase and reduce generosity were adopted; (a) UB generosity and UI generosity over the unemployment spell are calculated as presented in the Table 1, though for 2007. Countries are ranked by UI generosity over the unemployment spell. (b) UB coverage is calculated as a ratio of unemployment benefit recipients to total number of registered unemployed persons. UB coverage may exceed 100 for some countries as part-time workers (considered as employed) may receive unemployment benefits and some persons may continue receiving unemployment benefits despite being de-registered as unemployed (in particular older persons).

reduced in few countries. For example in Ireland it declined from 15 to 12 months (from 12 to 9 months) for those with at least (less than) 260 days of paid contributions. In France, duration was made proportional to the affiliation period (i.e. the period of contribution required for eligibility), which was reduced to increase the coverage of precarious workers.⁽³⁸⁾ Duration was also shortened in the Czech Republic and Poland; while to stabilise incomes of displaced workers the initial level of UI benefits was increased.

Graph II.4.2: Change in the maximum unemployment insurance benefits duration over the period 2007 and 2009

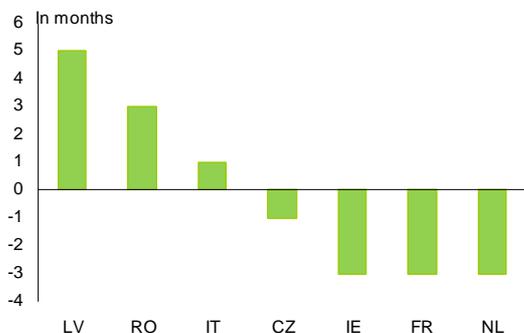


Source: Commission services, Joint European Commission-OECD project, using OECD Tax-Benefits models.

In Lithuania UI benefits were extended by 2 months in the municipalities particularly hit by recession compared to the national average. A change in the unemployment duration in the Netherlands, Sweden and Italy was not related to the crisis.

⁽³⁸⁾ As a result, UI benefits can now be granted in France only for 4 months (previously 7 months).

Graph II.4.3: **Change in the minimum unemployment insurance benefits duration over the period 2007 and 2009**



Source: Commission services. Joint European Commission-OECD project, using OECD Tax-Benefits models.

Only few countries accompanied an increase in the generosity of benefits with stricter conditionalities to avoid the build up of either benefit dependency or incentives to early retirement. For example, readiness to work or training activities was introduced in Italy among the conditionalities for unemployment benefits, the waiting period for unemployment benefits was prolonged in Lithuania for months during which severance pay is paid, and the minimum age for receiving additional days of benefits after the exhaustion of standard benefits was increased permanently from 59 to 60 years in Finland. Only, Ireland restricted eligibility criteria for new UI benefit claimants.

5. CONCLUSIONS

There is no single model for unemployment benefit systems. Countries differ considerably in terms of generosity (eligibility conditions, net replacement rates, benefit duration...), composition by instruments (unemployment insurance, unemployment assistance), and design (modulation of benefits over the unemployment spell, link of benefits to past earnings...). Those differences are related to the overall labour market and welfare policy framework and to economic, fiscal and employment conditions.

Unemployment benefits involve a trade-off between income smoothing and economic efficiency which depends, however, on the features of the unemployment benefit system and on the implementation of flanking policies. The positive stabilisation effects of unemployment benefits may imply weakened incentives in the labour market. A series of reforms can help to ease this trade off, notably by re-designing the level and time profile of unemployment benefit replacement rates in such a way to tackle the issue of unemployment traps and benefit dependence. Activation policies aimed at strengthening job search efforts for benefit recipients can also contribute to ease the above trade-off.

As stressed in the European Commission's 2011 Annual Growth Survey, ensuring a full use of the labour potential will be a key priority looking forward. In response to the crisis, the EERP recommended emergency labour market support measures and was successful in containing excessive labour shedding and sustaining the income and consumption of the unemployed, thus helping to contain the magnitude of the recession. Looking forward, priorities are changing. Although the economic outlook is becoming increasingly differentiated across countries, and therefore priority policy actions, there are a series of common elements. First, with growth resuming, the focus of budgetary policies is increasingly shifted to stabilising public finances. Second, macro and structural policies need to be conducive to a sustainable correction of the macroeconomic imbalances and to the stabilisation of financial markets. Third, it needs to be avoided that the past recession creates permanent effects on the growth potential. To this end, ensuring a full use of the labour potential is a key priority.

Reforms in unemployment benefit systems need to take into account these priorities and focus on strengthening incentives in the labour market and better adapting to the cycle. The Annual Growth Survey calls for reforms oriented towards: (i) design of unemployment benefits that rewards the unemployed going back to work or self-employment, including effective activation policies (ii) tax and benefit systems ensuring that work pays; (iii) unemployment insurance systems that adequately adapt to economic conditions. The Joint Employment Report also stresses the need of unemployment benefit systems that provide the right incentives to work, while ensuring income support and adaptability to the business cycle. Some examples of past reforms in unemployment benefit systems in EU countries show that these can be effective in tackling incentives.

Most concrete options for reforms ahead fall under a few headings, but the associated trade-offs depend crucially on the specific policy context of countries and their economic and employment situation.

- Unemployment insurance schemes need to be adapted to the economic cycle. A key choice is whether to move towards systems that adapt automatically the eligibility to benefits and their generosity on the basis of variables reflecting the cyclical evolution of the labour market or to keep those adaptations discretionary. The advantages in terms of timeliness, predictability and protection from vested interests from an automatic adaptation are likely to arise mostly for those countries where such systems can be implemented in a credible and sustainable manner, in particular where there is no risk of clash with budgetary targets and where the financing, structure, and design of the unemployment insurance is expected to stay relatively stable.
- The design of unemployment benefit systems needs to address the risk of unemployment traps and benefit dependence. Reforms of this type are relevant notably for countries with poor design of unemployment benefit schemes, a serious problem of long-term unemployment, insufficient infrastructure to ensure effective activation policies over the medium term, and overarching budgetary consolidation needs.

- Reform action to tackle *unemployment traps* needs to focus on net replacement rates. Priority should be given to the work categories at higher risk. Depending on the design of replacement rates, unemployment traps are often very high for low wage earners and in some cases when benefits are strongly linked to past income they can be high also for high wage earners.
- Reforms aimed at tackling *benefit dependence* should address the duration and the time profile of benefits over the unemployment spell. In some countries the duration of unemployment insurance is overly long; in others the issue mostly pertains to the duration of unemployment assistance. Replacement rates for unemployment insurance with long duration do not fall sufficiently in some countries. In other countries, with relatively short duration of unemployment insurance, an issue of benefit dependence may arise if net benefits do not fall sufficiently when the unemployed move from unemployment insurance to unemployment assistance.
- Effective activation policies need to flank unemployment benefit systems. Only in relatively few countries legislation concerning activation policies aimed at ensuring job search efforts by the unemployed is absent or nearly absent. In most cases, increased effectiveness of activation policies necessitates improved infrastructure and implementation, including adequate staffing in Public Employment Services, profiling of benefit recipients and tailor-made job search conditionality, regular monitoring of job search, credible and proportionate sanctions for lack of job search activity or compulsory training or other ALMPs.

Other additional specific reform options include:

- Strengthening ALMPs. In countries with a quantitatively relevant and entrenched unemployment problem, governments may consider using public funds to finance policies aimed at increasing the employability of long-term unemployed and subsidising employment. Training for the re-skilling and up-skilling of the unemployed, employment subsidies and

direct job creation may contribute in this respect, subject to a regular cost-benefit assessment. This type of financing can partly be achieved by means of savings in unemployment benefits obtained by strengthening incentives during the recovery. Such strategies seem adequate for counties with a large pool of long-term unemployed, sufficient fiscal space, and insufficiently developed ALMPs.

- Reforming the funding principle of unemployment insurance schemes with a view to increasing their portability and versatility. Individualised unemployment accounts financed by employees and/or employer contributions have the potential to increase the job-to-job portability of unemployment insurance schemes and to make these schemes more fungible, since they can be used to finance not only consumption during unemployment but also training or retirement income. These options appear relevant for countries with strong need of adjustment and sectoral relocation and for countries that are still in the phase of developing their own unemployment benefit system.
- Ensuring an adequate support for the newly unemployed after the expiration of short-time working schemes currently in place. In some countries, the labour market support during the crisis came also in terms of increased use of STWs. These schemes allowed to subsidise employment while reducing hours, and to obtain a relatively contained increase in unemployment rates. They provide a temporary cushion, and their discontinuation is necessary to prevent subsidising unviable jobs and delaying labour reallocation (Arpaia et al., 2010). Most STWs are currently being discontinued as a result of recovering economic activity. In some cases, however, the termination of these schemes will result in increased job destruction. Therefore, in some countries inflows into unemployment may still be relatively high for some time and the adjustment in the generosity of eligibility rules and benefits for unemployment insurance schemes could be delayed or raised if necessary and compatible with fiscal space.

Part III

Wage setting, price competitiveness,
macroeconomic imbalances

1. INTRODUCTION

In the current post-recession economic environment, a series of EU countries need to adjust to country-specific shocks and at the same time correct significant external imbalances. The adjustment process differs across EU countries since the crisis had a largely asymmetric effect. Countries with larger banks' exposure and major housing bubbles were hit hardest by the financial crisis. The negative impact of the crisis also appears to be deeper and lasting longer in countries characterised by large current account deficits, in light of reduced external financing availability ensuing from a re-assessment of risks. Moreover, the recovery appears more problematic in the Member States that have to take ambitious consolidation measures to ensure fiscal solvency.

The extent to which a monetary union was hit by major idiosyncratic shocks is probably unprecedented. An efficient adjustment of labour costs to those shocks is crucial since cost and price adjustment is the only way to nominal adjustment within a monetary union. Such nominal adjustment is needed to reduce both internal and external imbalances and to decrease rapidly the high unemployment that characterises some euro area Member States by allowing for reallocation across industries.

The role of wage setting frameworks received attention in recent EU economic surveillance. In light of the overarching priority to ensure the rebalancing of EU economies, the Annual Growth Survey includes recommendations on wages. This is reflected where necessary in Country Specific Recommendations in the framework of the BEPGs and Employment Guidelines. "Strict and sustained wage moderation, including the revision of indexation clauses in bargaining systems" were recommended for countries characterised by large current account deficits.

The Joint Employment Report recognises that "from a macroeconomic perspective, wage dynamics are also important for the correction of internal and external imbalances". Moreover, reforms in wage setting institutions were part of the reform packages agreed by countries under financial assistance programmes.

Looking forward, a proper understanding of the interaction between labour cost developments and macroeconomic imbalances and the implications of reforms of wage setting frameworks will be key for a successful implementation of the Excessive Imbalance Procedure (EIP).

The aim of this part of the report is threefold. First, it discusses the interaction between labour costs, price competitiveness and imbalances. Besides labour costs also other factors influence the competitiveness of a country, for example mark-ups. However, the focus here is exclusively on labour costs, in order to keep the discussion concise. Second, it proposes analytical benchmarks in order to assess the role of labour cost developments in driving price competitiveness and imbalances. Third, it discusses the role of government policies and wage setting institutions in triggering labour cost developments and shaping the responsiveness of wages to shocks.

2. LABOUR COST DEVELOPMENTS, PRICE COMPETITIVENESS AND MACROECONOMIC IMBALANCES

2.1. LABOUR COST DEVELOPMENTS AS COMPETITIVENESS SHOCKS

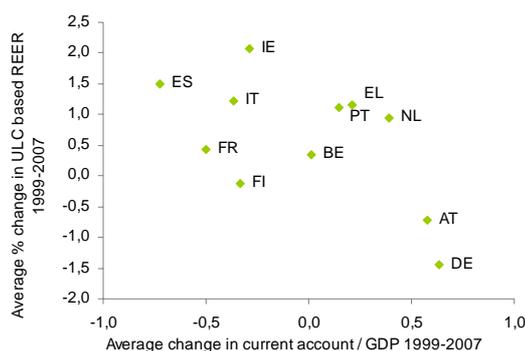
Exogenous shocks to labour costs affect both internal and external imbalances. The effect on internal imbalances is relatively straightforward, because labour costs directly influence the level of employment. Generally, labour cost shocks arising from the government's tax or wage policies (public sector wages, minimum wages) or from collective bargaining (e.g. a "wage push" linked to changed bargaining power of wage setters) may create or aggravate internal imbalances. Whether labour cost developments increase internal imbalances is usually assessed by looking at unit labour costs: imbalances are thought to increase if nominal labour costs increase much above or decrease much below productivity.

The impact of labour costs on external imbalances is more difficult to assess, because their connection is less direct. Exogenous developments in labour costs affect price competitiveness and therefore the trade balance and the current account. Labour cost shocks, if not offset by productivity developments, mark-up reductions and matched in partner countries, have implications for price competitiveness as measured by the ULC-based REER. This would increase (fall) for shocks leading to higher (lower) unit labour costs, thus leading to a worsening (improvement) of the trade balance and therefore the current account balance.

A worsening competitiveness position has clear implications for the current account balance. Graph III.2.1, displays a clear negative relationship between percentage changes in the ULC-based REER and changes in the current account over GDP ratio for euro area countries since 1999. However, this negative relationship cannot be interpreted as price competitiveness changes causing current account movements, since several other factors are important as well. For example as EC (2007) points out, the changing dynamics in risk premia and real interest rates and softened lending standards were among the main drivers of growing current account imbalances in the euro area in this period. In particular, absorption booms in countries receiving net capital inflows were

followed by overheating and stronger inflation dynamics, resulting in competitiveness losses.

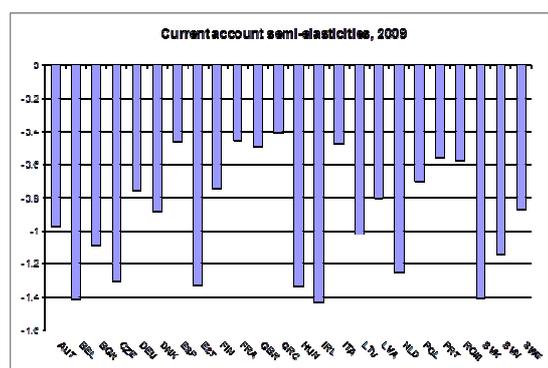
Graph III.2.1: Changes in REER and in current account balance, euro area, 1999-2007



Source: Commission services.

The direct impact of price competitiveness shocks on current account balances depends on trade openness and differs across countries. Assuming that the whole change in ULCs is translated into final prices (perfect pass-through from costs to prices), the partial equilibrium impact of the REER on the current account can be approximated by current account semi-elasticities.

Graph III.2.2: Current account semi-elasticities



Source: Salto and Turrini (2010).

Graph III.2.2 displays recent estimates of long-term current account elasticities for EU countries. A 1% increase in the REER appears to bring about a reduction in the current account balance / GDP

ratio of between ½ a point and 1 and ½ a point.⁽³⁹⁾ The current account reacts more to price competitiveness when the price elasticity of trade flows is higher and the economy is more open to trade.

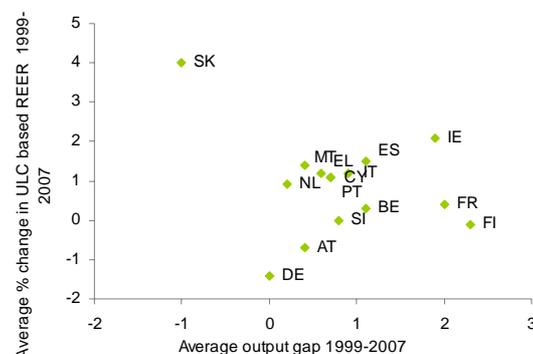
The overall impact of labour cost changes on the current account depends on other transmission channels and general equilibrium interactions as well. Exogenous changes in labour costs or labour taxes affect current account balances also via channels different than their effect on price competitiveness. For instance, positive aggregate demand effects associated with cuts in the tax wedge may reduce the saving-investment balance, thus offsetting the impact on the trade balance arising from the reduction in unit labour costs and the associated price competitiveness improvement.

2.2. MARKET-DRIVEN LABOUR COST ADJUSTMENT

Labour cost adjustments are important channels through which an economy adjusts to aggregate shocks. Therefore market-driven differentials in wage inflation across countries are natural and contribute to the correction of cyclical divergences in monetary unions. If a shock drives the output gap in a given country much above (below) that in other members of a monetary union, weaker (stronger) labour cost pressures lead to an improvement (deterioration) of price competitiveness and then to stronger (weaker) growth via net exports. In this respect, the market-driven adjustment of labour costs contributes to the automatic correction of internal imbalances and is perceived as a key equilibrating mechanism in monetary unions (European Commission, 2007b). However, the working of this automatic equilibrating mechanism can be mitigated by other factors, such as a labour force shock due to immigration. In any case, reforms that permit a prompt response of labour costs and prices are often advocated as key for a better functioning of the euro area adjustment mechanism. Graph III.2.3 depicts the expected positive relation between price competitiveness changes and output gaps across euro-area countries.

⁽³⁹⁾ It needs to be stressed that estimates of current account elasticities are notoriously uncertain due to well-known difficulties in estimating trade elasticities (e.g. Imbs and Mejean, 2011).

Graph III.2.3: Changes in REER and output gaps in current account balance, euro area, 1999-2007



Source: Commission services.

The market-based adjustment of labour costs to external imbalances is less obvious. The dynamics of labour costs within monetary unions is driven by a complex set of factors and an automatic adjustment to external imbalances via the market mechanism is not granted. As stressed in the previous section, labour cost developments may even be positively correlated with current account deficits if both are driven by domestic demand booms (ensuing, for instance, from looser financial conditions).

Neither is labour cost adjustment to internal imbalances necessarily consistent with the correction of external imbalances. It could be the case that the automatic adjustment mechanism to cyclical divergences (internal imbalances) contributes to a widening rather than to a correction of current account imbalances. The domestic demand boom that took place before the 2008 crisis in several peripheral euro-area countries was associated with output gaps above those recorded on average in the euro area and by positive inflation differentials. The loss in competitiveness associated with above-average growth rate of prices helped to cool down the overheating via falling net exports. This happened, however, at the expense of growing current account imbalances. Conversely, at the current juncture adjustment to cyclical divergences in a series of euro-area countries that are characterised by protracted recessions or stagnation (e.g. Greece, Spain, Portugal) would imply recovery via net exports and correction of current account deficits that were accumulated in the past.

Apart from the adjustment in overall labour costs, relative labour costs play a relevant role in the correction of current account balances. On the one hand, what ultimately matters for international price competitiveness is the relative price of the goods and services that are traded. In this respect, price competitiveness gains do not necessarily require major changes in overall labour costs if labour costs developments in tradable activities are supportive of adjustment. On the other hand, by looking only at relative labour costs in tradable activities compared with foreign partners, a key element is missing: the so-called "internal real exchange rate". For a successful rebalancing process, resources need to be shifted from non-tradable to tradable goods and services. If wages remain high in the non-tradable sector this process cannot take place. In this respect, falling relative wages in the non-tradable versus the tradable sector favour the correction of current account deficits.

2.3. THE RELEVANCE OF SUPPORTIVE WAGE DEVELOPMENTS FOR THE ADJUSTMENT OF EXTERNAL IMBALANCES

Current account deficits are the result of exogenous trends in price competitiveness or excessively buoyant demand conditions. In the latter case, price competitiveness developments interact in a relevant fashion as growth in domestic absorption has implications for inflation differentials. If current account deficits adjust as a result of capital flights and the reassessment of financial risks, adjustment on the quantity side will be accompanied by a major contraction in economic activity and unemployment. Similar effects on economic activity will result from policies aimed at keeping the growth rate of domestic demand under control. Consistent price competitiveness developments are part of the recipe for engineering a rapid adjustment in competitiveness and a recovery in employment. In absence of such competitiveness adjustment, subdued economic activity and high unemployment will be persistent, with large social costs. Symmetrically, countries with large and persistent current account surpluses may want to correct such imbalances to de-cumulate risky foreign assets and ensure a smoother pattern of consumption across time periods and generations.

Adjusting current account deficits requires not only keeping under control the growth rate of domestic demand (which would resume as the economy recovers), but also putting in place adequate expenditure-switching policies which require restoring relative prices to a pre-boom, pre-deficit situation. Actually, the correction in relative prices might even have to target a more ambitious benchmark, in light of accumulated net foreign liabilities and the associated increased net foreign income deficit. As mentioned previously, market-based wage adjustment can help in this respect but it may not be sufficient. Other policy tools to support the adjustment of wages and prices and to foster productivity growth might be needed. In particular, those policies aimed at avoiding an overdevelopment of the non-tradable sector in any economy should be seriously considered. This implies fiscal policy (fiscal incentives), human capital investment and financial sector regulation among the most important.

The effective use of policies requires a proper understanding of ongoing labour cost developments and of the impact of policy tools on labour cost outcomes. Current trends in wages may or may not be in line with adjustment to internal and external imbalances. Having appropriate analytical tools to assess wage developments is the first requirement for effective policy intervention. The second requirement is a proper understanding of the transmission channels and the quantitative impact of policy measures affecting labour costs.

3. ASSESSING AGGREGATE WAGE DEVELOPMENTS

3.1. BENCHMARKING LABOUR COST DEVELOPMENTS

In order to assess whether labour costs grew too fast or too slow in a Member State labour cost growth has to be compared to appropriate benchmarks. This section uses three benchmarks for such an assessment while focusing on the following three questions. Are labour cost developments consistent with effective labour market matching and with an efficient use of labour inputs? Is the growth in labour costs compatible with orderly developments in price competitiveness? Are labour cost developments consistent with standard responses to fundamentals?

The three benchmarks are the following: ⁽⁴⁰⁾

- Real compensation per employee growth in line with productivity growth.
- Nominal compensation per employee growth in line with the maintenance of price competitiveness, i.e. consistent with a constant ULC-based REER.
- Nominal compensation per employee growth consistent with estimated wage equations.

The *productivity growth benchmark* embodies an equilibrium condition (Cobb-Douglas production function with constant returns to scale) and provides grounds for a normative assessment. If this requirement is satisfied then there is evidence that labour cost developments are consistent with matching between demand and labour supply and with a fair and efficient allocation of resources. This condition implies indeed that labour costs grow broadly in line with labour demand and that labour is rewarded in proportion to its contribution to value added growth. Therefore this benchmark can signal internal imbalances.

Some caveats are in order. First, the condition refers to microeconomic properties of labour markets: labour market matching is supported if

the equality of real labour cost and productivity holds across industries, firms, geographical areas, occupation. Second, the above properties regarding efficiency and distribution hold under the assumption of perfect competition, constant returns to scale in production, and factor neutral technological progress, which implies that relevant deviations from those assumptions may render the equality between real labour cost and productivity growth less meaningful. Third, temporary deviations from the equality of real labour cost and labour productivity growth may be desirable in several instances: the need to offset previous discrepancies between real labour cost and productivity *levels*, the need to ensure the effective and rapid absorption of unemployment, the need to rapidly correct potentially harmful and unsustainable external imbalances.

The fourth caveat is computational, since the standard output-per-employee measures neglect the phenomenon of labour hoarding during the cycle and adjustment on the extensive margin by reducing or increasing working hours. Moreover, Short Term Working Schemes whereby employment is maintained although producing lower output via subsidized schemes is not captured by output-per-employees measures. To account for the above phenomena, both output per employee and output per hour worked could be used as alternative measures of labour productivity, but available series are generally shorter and available with lags. An additional issue is the endogeneity of the labour productivity measure. ⁽⁴¹⁾ This is often addressed by resorting to a different measure of productivity, namely the share of labour in Total Factor Productivity (TFP), which represents a proxy of labour productivity in the long-term, along a balanced growth path (European Commission, 2007a). In light of the well-known measurement issues with TFP, and because of the strong assumption that countries are evaluated on a balanced growth path (assumption hardly satisfied for catching up economies) this route was not followed in the present report.

⁽⁴⁰⁾ These benchmarks are not specifically aimed at operationalising EIP surveillance and that they are not directly linked to thresholds of the EIP scoreboard.

⁽⁴¹⁾ The issue arises because comparing meaningfully real wages to labour productivity requires that two being independent. However, since labour productivity depends on labour intensity of production techniques which depends in turn on wages, an endogeneity issue arises.

Box III.3.1: Are real wages growing in line with productivity sufficient to avoid price competitiveness losses?

Real wages growing in proportion with labour productivity throughout the economy indicate that labour demand equals supply. Under some conditions (constant returns to scale, perfect competitions, factor-neutral technological progress, no change in the tax wedge...) this implies that: (i) wages grow in line with labour demand; (ii) labour receives its contribution to value added; (iii) the wage share remains constant; (iv) real unit labour costs (RULC) remains constant.

The proportionality of real wages and productivity is however not sufficient for stable developments in REERs. Price competitiveness may change either because in partner countries real wages do not follow productivity or because of inflation differentials. Large and persistent inflation differentials are normally the result of different monetary conditions across countries. Hence, in a monetary union, real wages growing in line with productivity in all members are normally helpful to create the conditions for orderly competitiveness developments. However, even this is not a sufficient condition for stable competitiveness developments (as measured by ULC-based REERs) for a series of reasons: (i) different intensity of trade with non-euro area countries characterized by different monetary conditions and floating nominal exchange rates; (ii) demand-driven inflation differences arising from cyclical divergences; (iii) inflation differences linked to asymmetric sectoral productivity developments (Balassa-Sameulson effects) and to catching up dynamics (changing comparative advantage, improvements in product quality...).

It needs to be stressed that the appreciation of ULC-based REERs does not always signal competitiveness problems. If a country has a stronger relative productivity growth in the tradable compared with partner countries, the REER would appreciate due to rising wages throughout the economy, but without significant implications for the export performance, since in the tradable sector productivity and wage dynamics would offset each other (necessarily so, because cross-border differences in the prices of tradables are limited by international competition and arbitrage).

The constant ULC-based REER benchmark compares actual nominal labour cost growth to the hypothetical labour cost growth that would leave the ULC-based REER constant. This hypothetical labour cost growth assumes that labour productivity is unchanged as well as unit labour costs in partner countries, and requires the variation in the REER to be offset by a variation in nominal labour costs.

This benchmark has no clear normative implications. It just permits to assess whether, keeping labour productivity and unit labour costs developments in partner countries unchanged, developments in nominal wage and non wage labour costs are in line with the maintenance of price competitiveness, and therefore in this respect not harmful for external imbalances. The meaning of this benchmark is that of a consistency check and its usefulness is that it can separate the role of productivity and unit labour costs in foreign

countries from those of labour cost per employee developments. It needs to be stressed that constant price competitiveness is a neutral benchmark which is chosen for convenience, and that desirable price competitiveness developments need not imply constancy of the REER in light of the need to correct existing imbalances, Balassa-Samuelson-driven equilibrium appreciation trends.

The wage equation benchmark takes into account the response of labour costs to main determinants such as inflation, labour productivity, unemployment, and that distinguishes between short and long-term dynamics. The aim of this benchmark is to assess whether labour cost developments observed in a given country and time period were in line with what would be predicted on the basis of fundamentals or whether some temporary or structural factors (policy or market driven) played in the sense of promoting exceptionally high or low labour cost growth.

This benchmark is estimated by a macroeconomic wage regression. The regression explains nominal labour cost growth with inflations, growth in labour productivity and changes in the unemployment rate. A limited number of variables was chosen for the regression, because the aim is not to explain wage growth in each country as much as possible, but rather to see whether wage growth in a country is consistent with the

The specification can be regarded as a reduced form supply-demand system for the labour market. It also assumes that in case of a shock labour cost growth converges on the long run to the equilibrium predicted by these fundamentals. Technically a panel error-correction model is estimated, which is described in detail in the Appendix. The panel was chosen, because it provides more robust estimates.

Graphs III.A3.1 and III.A3.2 compare real compensation per employee growth to the labour productivity benchmark. As expected, real labour cost growth follows quite closely labour productivity growth in most countries. In line with expectations, it is also observed that after the crisis, the reduction in real labour cost growth is not as dramatic as that of labour productivity, as a result of temporary labour hoarding. Before the crisis, some countries like Austria and Germany were characterised by real labour cost growth below productivity, while the opposite took place in other countries e.g. Ireland.

Graphs III.A3.3 and III.A3.4 display the growth in nominal compensation per employee and the ULC-based REER benchmark. Differences between the actual nominal compensation growth and this benchmark are often remarkable. This is for several reasons, including the fact that in some cases changes in REER are also linked to nominal exchange rate developments and that the assumption of a constant REER is a demanding one. The positions of most Member States of the EU15 improved before 2000 since actual labour cost growth was lower than that implied by a constant REER. The UK and Portugal were notable exceptions to this pattern. However, after 2000 many countries experienced competitiveness losses, including Denmark, Spain, Greece, Ireland, Italy, when labour cost growth exceeded the constant REER rate. In the new Member States labour cost growth generally exceeded the constant

REER benchmark between 1995 and 2010, except for Cyprus, Poland and Slovenia.

Graphs III.A3.5 and III.A3.6 show the growth in nominal compensation per employee and the predictions from wage equations.⁽⁴²⁾ Until 2008, labour cost growth was lower than that predicted by the fundamentals in Austria, Spain, Finland, Slovakia and in Germany after 2003, while in the UK and Hungary labour cost growth was consistently higher than that predicted by the fundamentals. Predicted nominal labour cost growth falls considerably after the crisis. This pattern is fairly consistent with that resulting from the labour productivity benchmark, although predicted labour cost developments appear in this case less volatile. With this benchmark, the fall in labour costs after the crisis is further justified by rising unemployment.

These results show that different labour cost benchmarks provide complementary information. These differences, nevertheless, can help identifying ex-post the role of labour cost developments in driving competitiveness. Moreover, the reading of labour cost benchmarks should not be mechanistic. The information provided by the different benchmarks should be used instead to shape a view on the role of labour costs in the evolution of competitiveness.

In some cases all benchmarks point to a similar role of labour costs in shaping macroeconomic imbalances. For instance, in the case of Germany, all benchmarks confirm that in the second part of the 2000s moderate labour cost growth contributed to the reduction of the REER; symmetrically, in the case of Latvia, all benchmarks reveal a role for exceptionally strong labour cost growth in driving the deterioration of competitiveness in the second half of the 2000s.

In other cases, indications from different benchmarks may differ. For example, in the mid 2000s, labour cost growth appears to have been above one compatible with stable competitiveness for Ireland and Slovakia. However, such labour cost growth in both countries appears in line with

⁽⁴²⁾ The predictions include fixed effects: country-specific constants. These can be interpreted as structural elements explaining wage growth in each country on top of inflation, labour productivity, and unemployment and the error correction term.

what explained by fundamentals, as revealed by the benchmark based on the estimation of wage equations, and in the case of Slovakia also broadly in line with productivity growth.

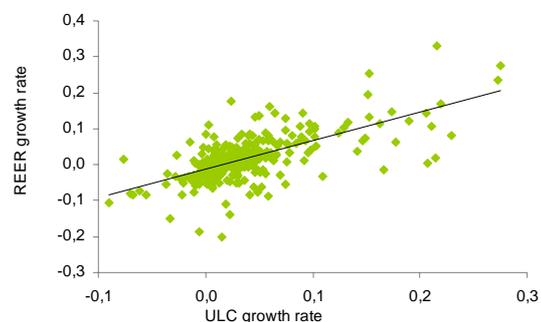
An overall assessment of labour cost developments needs to look at a broader set of variables and cannot be limited to the benchmarks outlined above. Other aspects that could be included in the analysis are labour force shocks (for example, immigration) and the change in the sectoral structure of the economy. Furthermore, disaggregated labour cost data would permit to decompose aggregate developments between common trends and composition effects. An assessment of trends at sectoral level appears necessary in several respects: (i) distinguishing between government vs private sector dynamics; (ii) assessing whether labour cost dynamics between tradable and non-tradable sectors are supportive of the reallocation of resources necessary for the rebalancing of the economies; (iii) assessing whether labour cost developments are supportive of the growth of the most dynamic export sectors. An analysis of labour cost developments at sub-national level is relevant especially for the assessment of the response of labour costs to local unemployment conditions. Firm-level data are helpful to measure the response of labour costs to productivity conditions at the level of the firm. A decomposition of labour cost data by education and skills of the workforce permits to control for effects arising from changing composition of employment.

3.2. UNIT LABOUR COSTS AND PRICE COMPETITIVENESS DEVELOPMENTS ACROSS EU COUNTRIES

Next to the assessment of labour cost developments another frequent policy question is how labour costs influence competitiveness. As it was discussed in chapter 3.1 unit labour costs (ULCs) are usually used to assess this relationship. The ULC is the ratio of compensation per employee and real output per the number of employed. Therefore the evolution of the ULCs depends both on nominal labour cost developments and on productivity. Since it compares nominal cost to a real variable ULC developments also indicate whether price stability is maintained in a country or not.

Graph III.A3.7 and III.A3.8 show ULC index numbers for Member States and therefore provide information on the cumulative growth rates in labour cost conditions compared to a base year. ULCs (solid line) were growing in all EU countries since 2000, with the exceptions of Germany and Poland. In all countries, nominal compensation per employee grew faster than productivity, except Germany and Poland, where nominal labour costs rose broadly at the same pace as productivity (dashed line). In some euro-area countries (e.g. Spain, Italy, Portugal), rising ULCs were to a greater extent the result of stagnating labour productivity, while in others (notably Ireland) strong productivity growth contributed to contain ULC dynamics. In most New Member States stronger labour productivity growth is normally overshadowed by an even higher growth of nominal labour costs, a phenomenon consistent with Balassa-Samuelson effects and structural change during catching up.

Graph III.3.1: REER and unit labour cost growth rates



Source: Commission services.

Stronger ULC growth is normally associated with price competitiveness losses, as measured by the real effective exchange rate (REER). The relationship between the growth in the REER and the ULC is however less than perfect, as price competitiveness as measured by the real exchange rate is driven also by developments in competitor countries (Graph III.3.1). Moreover, REER developments appear to be more strongly associated to dynamics in overall price levels than to changes in real unit labour costs (Graphs III.A3.9, III.A3.10). This suggests that real labour costs growing above or below productivity have no straightforward implications for the REER.

Overall, differences in ULC growth are driven to a large extent by inflation differentials associated with catching up dynamics, financial development and integration, and different monetary and exchange rate arrangements. This is especially the case for differences across New Member States and between New Member States and the rest of EU countries. To some extent, also within the euro area inflation differentials were driven by catching up dynamics, but credit dynamics associated with the reduction of risk premia played a relevant role.

In some instances, however, policy frameworks affecting productivity and labour cost developments may have played a role. For instance, productivity differences across euro area countries are to some extent the result of quality and quantity differences in infrastructure and education and research facilities and staff, and different degree of specialisation in dynamic sectors. Different policy frameworks also affected ULCs via labour cost developments (e.g. the sustained episodes of wage moderation in Germany and Poland).

4. GOVERNMENT POLICIES AND LABOUR COST DEVELOPMENTS

4.1. GOVERNMENT POLICIES AND REGULATION AFFECTING LABOUR COSTS

The analysis of labour cost developments in the previous chapter did not take into account government policies explicitly. However, policy decisions affect labour cost dynamics both directly and indirectly. An proper assessment of labour cost developments has to look at these effects as well. First, there are government policies with an almost direct impact on wage developments:

- Wage and employment in the public sector. Wages in the government sector spill over to a certain extent to the private sector and, in absence of other mechanism of wage co-ordination and in presence of a large public sector may play a role of wage leadership. Government employment decisions can indirectly contribute to wage demands in the private sector, as the bargaining power of unions and workers is higher when government absorbs a relevant share of the workforce.
- The definition of statutory minimum wages. Minimum wages aim at guaranteeing a "fair" wage also in low pay employment and to address cases in which workers are in a weak position vis-a-vis employers with significant bargaining power. In spite of generally being significantly below actual wages, they squeeze the lower end of the wage distribution and minimum wage changes may play a signalling role for contractual wages.
- The introduction of statutory wage indexation systems. Wage indexation may induce real wage rigidity, thus hampering the absorption of unemployment in the presence of real shocks (e.g. Fischer, 1977). If wage indexation mechanisms do not take into account inflation linked to changes in the terms of trade (notably, changing prices of imported energy), second-round inflation effects may aggravate competitiveness losses.
- Social security contributions and direct labour taxation. Higher non-labour costs correspond to increased ULCs in the short-to-medium term.

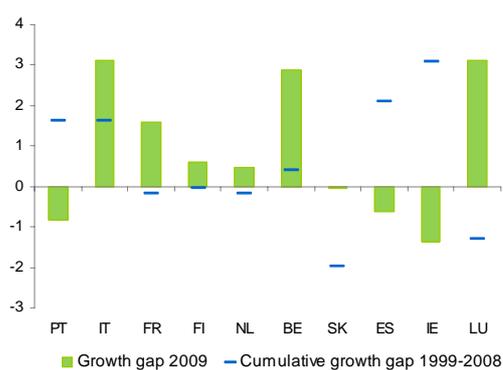
In the longer run, net wages adjustments partially compensate for the increased tax wedge.

Second, there are also government regulations and policies that affect wage responsiveness in a more indirect way. These are the unemployment benefit system and employment protection legislation (EPL). Although they may have an impact on the level of wages, this impact is likely to be rather indirect and uncertain. These labour market institutions may instead play a more relevant role as framework conditions shaping the extent to which wages respond to fundamental determinants via the market mechanism and collective bargaining:

- The generosity of unemployment benefits. Higher replacement rates and especially longer duration of unemployment benefits may reduce labour supply and increase the bargaining power of unions and workers, thus leading to higher wages. Generous unemployment benefit replacement rates and duration may also affect the responsiveness of real wages to unemployment, as the cost associated with higher wage demands in terms of increased risk of unemployment is mitigated by benefit generosity (e.g. Peeters and den Reijer, 2003);
- Employment protection regulation. It is often argued that generous EPL may translate into lower wages in light of the so-called "bonding" argument: employers are induced to shift onto workers the cost of generous severance payments or cumbersome dismissal procedures. In general, EPL raises the effective cost of labour, thereby reducing job creation and labour demand and thereby translating into lower wages for a given level of "all-inclusive" labour costs. EPL also affects the responsiveness of wages. It has been argued that high EPL shifts the power between the insiders and outsiders to the labour market. High EPL raises the bargaining power of the employed and therefore their ability to resist wage moderation. This makes it more difficult to replace currently employed workers with low-wage outsiders, which leads to downward wage rigidity (Holden, 2004).

The evidence supports the view that government wages directly affect private wage dynamics. Graph III.4.1 shows that a series of euro area countries that had the largest growth in private wages in the past decade were those exhibiting the largest positive gap between government and private wage dynamics. This prima-facie evidence is confirmed by several empirical studies (for example Lamo, Perez and Schuhknecht, 2008; Holm-Halluda et al., 2010) that report strong correlation between public and private sector wages. Moreover, European Commission (2008) and Perez and Sanchez (2010) also find evidence that public sector wages affect private sector wages through "demonstration effects", that is by influencing the outcome of private wage agreements taking place after a change in public sector wages. The magnitude of the effects of government wage growth on private wage developments is likely to depend considerably on government size, as with a large government sector demonstration effects are stronger, and the impact on the bargaining power of workers more pronounced. Finally, it has to be mentioned that the impact of wages signed in public companies and in the private companies that operate in the same sector as public companies is also crucial for private sector wage developments.

Graph III.4.1: Growth gap between compensation per employee in public and private sectors

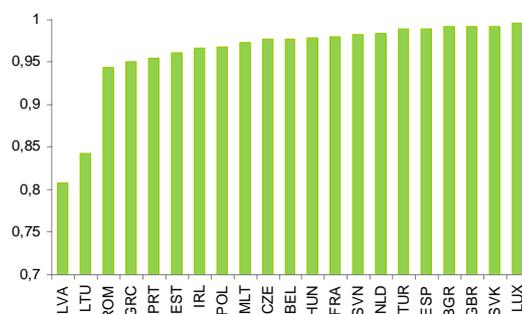


Source: OECD.

Minimum wages affect actual wages via different channels. Graph III.4.2 shows that the correlation between nominal wages and statutory minimum wages (lagged 3 years) is strong. More rigorous empirical evidence from aggregate series supports the view that minimum wages may perform a coordination role and drive overall wage

developments.⁽⁴³⁾ Analysis on disaggregate data permits to decompose the effect of minimum wages in two elements: (i) the truncation of the lower end of the wage distribution, (ii) effects spilling over higher up in the wage distribution ("spillovers" or "ripple effects"). Most studies find a spike at the minimum wage in the wage distribution (e.g. Card and Kruger, 1995, Di Nardo, Fortin and Lemieux, 1996; Stewart and Swaffield, 2002), and several studies provide also evidence for spillover effects for employees whose wage is close to the minimum (e.g. Manning, 2003; Neumark, Schweitzer and Wascher, 2004).⁽⁴⁴⁾ This evidence supports the view that minimum wages may perform a coordination role and drive wage developments close to the minimum wage, although the effect is largely country-specific, depending inter-alia on the overall wage setting framework and on the extent to which minimum wages are binding in light of their level and design.

Graph III.4.2: Minimum wages and compensation per employee



(1) Correlation of three-year-lagged minimum wages and compensation per employee, by Member State

Source: Eurostat.

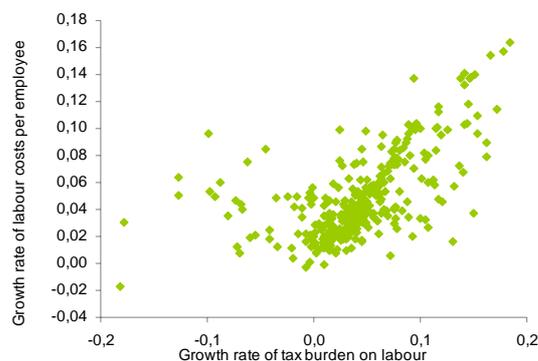
Changes in social security contributions and labour taxes are likely to have a strong impact on ULCs. Graph III.4.3 shows that nominal labour costs per employee tend to grow broadly in the same proportion as the tax burden on labour. Although

⁽⁴³⁾ Gramlich (1976) estimates the elasticity of the average wage to the minimum wage in a Phillips curve equation and reports an elasticity of 0.027. Elasticities estimated in other similar studies are also fairly low.

⁽⁴⁴⁾ Neumark, Schweitzer and Wascher (2004) estimate an elasticity of actual wages to the minimum wage of 0.8 for workers less than 10 per cent above the minimum that gradually declines to 0.4 for the a wage between 10 and 30 percent above the minimum and to 0.15 for 1.5 to 2 times the minimum.

the scatterplot is not to be interpreted as causation (the tax burden being linked to labour compensations) it suggests that a substantial part of the tax wedge adds to labour costs rather than being shifted onto workers in terms reduced net wages. Evidence on the impact of the tax wedge on total compensation costs (reviewed, inter-alia, by Nickell and Layard, 1999, and Daveri and Tabellini, 2000) indicate that in the short run labour taxes are passed on to workers only to a minor extent. However, it is unclear whether this holds in the long run as well: Layard et al. (1991) and Nickell (2004) argue that real wage absorb these tax changes. Azemar and Desbordes (2010) provide evidence that wage bargaining institutions influence the long run response and in countries: with low wage bargaining coordination, about half of non-wage labour costs are shifted by to employees, while in high coordination countries the shift is almost complete.

Graph III.4.3: Tax burden on labour and labour costs



(1) EU OECD countries, 1981-2007. Outliers (growth in tax burden above 2% or below -2%) excluded.

Source: OECD.

The extent to which changes in government wages, minimum wages, tax wedges affect price competitiveness and imbalances depends on a number of factors. Assuming that these policies produce a significant impact on labour costs, the ultimate effect on imbalances depend on a number of conditions being in place:

- First, changes in unit labour costs need to translate into final prices rather than being mostly absorbed by cost-price mark-ups;
- Second, employment and employment composition effects may have repercussions on

labour productivity thus possibly offsetting, via this channel, the impact on unit labour costs;

- Third, the impact on price competitiveness depends on accompanying policies. For instance, in the relevant case of tax wedge cuts, budgetary neutrality could be achieved in different ways, and whether revenues are raised or expenditures cut, and which type of alternative revenues are used to compensate for the tax wedge cut matters for the overall impact on price competitiveness (e.g. European Commission, 2009);
- Fourth, general equilibrium effects play a role. In addition to the mechanic partial equilibrium effect of price competitiveness on the trade balance and therefore the current account, it needs to be taken into account that these policies affect consumption, investment and the budget balance with non-trivial and possibly relevant implications for the current account. Still in the case of cuts in the tax wedge, the associated boost in consumption and investment tends to reduce the savings-investment balance, thereby offsetting the positive impact on the current account arising from trade balance developments linked to price competitiveness improvements.

4.2. THE ROLE OF THE WAGE BARGAINING SYSTEM

Government may also promote reforms in the wage bargaining system with a view to affect labour cost developments. Since wage outcomes are driven by the market mechanism and by bargaining institutions that the government can only partly control and shape, reforms will consist of a mix of legislative acts defining the broad framework for collective bargaining and a dialogue to influence the practice followed by social partners.

A series of aspects of the collective bargaining framework may have a bearing on wage outcomes. First of all, wage bargaining may either be highly decentralised (taking place mostly at firm level), highly centralised (wage formation at national level) or may take at an intermediate level, normally at the level of sectors, an in some cases at

the level of regions or occupations. Aggregate wage developments depend to some extent on the extent of centralisation because this matters for the bargaining power of wage setters and for the extent to which wage bargaining takes into account national-level objectives. Moreover, centralisation matters for the extent to which wages can reflect differences in productivity across sectors and firms and labour market conditions across geographical areas. Some economic theories (e.g. Calmfors and Driffill, 1998) predict that the worst case for wage moderation is when bargaining centralisation is intermediate (typically, bargaining taking place at sectoral level): in this case unions may have substantial bargaining power while not fully internalising the aggregate implications of their wage demands;

Secondly, the degree of coordination also matters for the extent to which wage dynamics could be consistent with macroeconomic objectives. Horizontal co-ordination (across sectors) could be either explicit ("peak-level" coordination involving bilateral or tripartite agreements or social pacts) or implicit, achieved by means of regular interaction among sectoral trade unions or the existence of phenomena of "wage leadership" and "pattern bargaining" (some sectors or confederations driving the outcome in the rest of the economy). Vertical co-ordination (across bargaining levels) also affects overall wage outcomes; in most EU countries this is ensured by the legal enforceability of collective contracts and the so-called "favourability principle" whereby lower levels of bargaining can only improve upon conditions established at higher level. For a given degree of centralisation, more effective coordination helps in achieving macroeconomic goals (stabilising inflation, tackling unemployment, correcting external imbalances). In particular, since the decisions related to wage contract renegotiation are characterised by a high degree of interdependency, uncoordinated wage setting frameworks may lead to wage inertia in the presence of aggregate shocks (Ball and Romer, 1991);

Thirdly, wage outcomes are also affected by the bargaining coverage, namely, the extent to which employees are covered by collective bargaining, which in turn largely depends on the presence and use of extension mechanisms, which permit bargained wages are extended to firms that are not part of contracting organisations. Extension

mechanisms provide a level playing field for firms belonging to the same employers' organisation. At the same time, the erga omnes extension of bargained wage conditions may create tensions between wage and productivity conditions at firm level in sectors where employers' organisations are not representative or where firms' productivity is largely dispersed. Such a risk could to some extent be reduced by the use of variable pay systems, whereby wages are linked to individual, company, or group performance;

Finally, other aspects of collective bargaining matter for aggregate wage dynamics, including the presence of wage indexation mechanisms enshrined in law or in collective contracts and the legal framework and practice followed for negotiating and renewing contracts. While automatic indexation clauses ensure nominal flexibility in the presence of changing cost of living at the expense of risks of real rigidity in the presence of shocks of different sources (e.g. terms of trade shocks), long average duration of contracts or long lags before renewal present the risk of nominal rigidity. It needs however to be taken into account that contract length is ultimately the result of collective bargaining, and that contract duration depends on negotiation costs and on the cost of keeping contracts unchanged, that largely depends on the prevailing inflation rate (Ball, Mankiw, and Romer, 1988).

The elements and characteristics of the wage setting system differ considerably across EU countries. Table III.4.1 shows the average value of indicators from the ICTWSS database.⁽⁴⁵⁾ A description of the indicators is provided in Appendix 2. It appears that countries differ quite considerably in terms of minimum wage practices, union density, level at which collective bargaining takes place, coverage of collective bargaining, wage bargaining coordination. Wage bargaining is relatively decentralised in the UK, Luxemburg, and in most New Members States, conducted mainly at sectoral level in most continental and

⁽⁴⁵⁾ The Database on Institutional Characteristics of Characteristics of Trade Unions, Wage Setting, State Intervention and Social Pacts is compiled by Professor Jelle Visser at the Amsterdam Institute for Advanced Labor Studies and is one of the most systematic and comprehensive databases on collective bargaining characteristics. See also European Commission (2010, 2011) for analyses based on the ICTWSS database.

southern European countries, relatively centralised in Belgium and the Netherlands, Ireland, Finland, Slovenia.

Table III.4.1: **Wage bargaining characteristics**

	Union density	Coordination of wage bargaining	The dominant level(s) at which wage bargaining takes place	Minimum Wage Setting	Bargaining coverage, adjusted
AT	36,4	4,0	2,7	1,1	99,0
BE	53,0	4,5	3,4	3,9	96,0
BG	27,5	2,0	2,5	7,7	25,0
CY	67,2	2,0	2,0	6,0	:
CZ	34,0	2,0	2,0	5,8	49,5
DE	24,2	4,0	2,5	1,0	64,2
DK	73,5	3,5	2,6	1,0	77,8
ES	15,8	3,5	3,0	6,0	80,2
EE	20,2	1,0	1,0	3,9	22,6
FI	75,3	3,8	4,1	1,8	86,7
FR	8,3	2,0	2,0	6,0	95,4
UK	30,3	1,0	1,0	4,3	35,0
EL	27,5	4,0	3,5	3,0	82,3
HU	25,5	2,0	2,0	4,9	41,7
IE	41,8	5,0	4,0	2,8	:
IT	34,8	4,0	3,0	1,0	80,5
LT	23,0	1,0	1,0	5,3	13,5
LU	42,5	2,2	2,2	5,0	60,0
LV	23,4	1,0	1,0	6,8	20,0
MT	55,7	1,0	1,0	5,0	56,6
NL	22,8	4,0	3,3	4,5	84,7
PL	24,8	1,0	1,0	6,5	40,9
PT	20,6	2,7	2,0	5,7	67,9
RO	39,2	3,9	2,0	6,4	:
SK	35,5	4,2	2,5	4,4	44,3
SI	44,2	4,2	3,8	3,1	100,0
SE	79,5	3,0	3,0	1,0	91,2

(1) Average value of indicators by country, 1995-2007. See Appendix 2 for the definition of the indicators.

Source: Commission services.

Union density range from very high rates in Scandinavian countries to much lower rates in France, Spain and the Baltics. Bargaining coverage exhibits instead a lower degree of variation, being low mostly in countries where extension mechanisms are not in place or rarely used. Although erga-omnes extension mechanisms at sectoral level are common in EU countries, considerable differences exist: in some countries the extension is automatic or semi-automatic, in others is the outcome of government decisions and/or subject to conditions regarding the representativeness of contracting organisations. Moreover, countries differ in terms of presence and applicability of opening clauses allowing firms to derogate also downward from collective

contracts concluded at higher level. Practices regarding minimum wage policies vary widely, ranging from countries where no statutory minimum wage is in place to others in which the minimum wage is set by the government with little involvement of the social partners.

A series of trends have characterised wage setting institutions over the past two decades. First, unionisation has been falling in most EU countries, as a result of transformations in the structure of the economies and in collective representation. Second, in a number of countries there was a gradual tendency towards more decentralised (and generally less coordinated) wage setting frameworks, mostly in response to changing dynamics of international competition. Although the mail level at which collective bargaining takes place has remained stable over time, a higher incidence of firm-level bargaining has taken place in a series of countries, while in others the use of opening clauses providing ways to derogate from higher-level collective agreements has been introduced. Third, bargaining coverage followed largely country-specific trajectories: it fell in most New Member States, the UK, Germany and Portugal, while it remained stable or increased in the remaining countries.

As revealed by the cross-country correlation among average indicator values in Table III.4.2, the various elements and characteristics of the wage setting system are strongly linked. Countries with a more centralised wage setting are also characterised by a high degree of wage coordination and or bargaining coverage and a less intensive use of minimum wage policies. The same correlation pattern is observed also across a whole panel of EU countries over the 1995-2007 period, indicating that changes over time in wage setting institutions within a country are correlated. Hence, for instance, reforms reducing the centralisation of wage bargaining tend to be accompanied by a stronger use of minimum wage policies.

Countries tend to fall into a relatively limited number of typologies of collective bargaining models. These strong correlation patterns across wage setting characteristics also reveal that countries tend to cluster into a relatively small number of wage setting models. Although different taxonomies of wage setting models are found in the literature (e.g. OECD 2004; McHugh 2002;

Table III.4.2: **Correlations among wage bargaining characteristics, EU27, 1995-2007**

	Union density	Coordination of wage bargaining	The dominant level(s) at which wage bargaining takes place	Minimum Wage Setting	Bargaining coverage, adjusted
Correlation of average values across countries					
Union Density	1				
Coordination of wage bargaining	0,038	1			
The dominant level(s) at which wage bargaining takes place	0,295	0,835*	1		
Minimum Wage Setting	-0,608*	-0,468*	-0,272	1	
Bargaining coverage, adjusted	0,342	0,492	0,637*	-0,399	1
Correlation across the whole panel					
Union Density	1				
Coordination of wage bargaining	0,179*	1			
The dominant level(s) at which wage bargaining takes place	0,283*	0,819*	1		
Minimum Wage Setting	-0,456*	-0,347*	-0,367*	1	
Bargaining coverage, adjusted	0,285*	0,607*	0,595*	-0,322*	1

(1) Denotes partial pairwise correlation coefficients different from zero at least at 10% statistical significance level. See Appendix 2 for the definition of the indicators.

Source: Commission services.

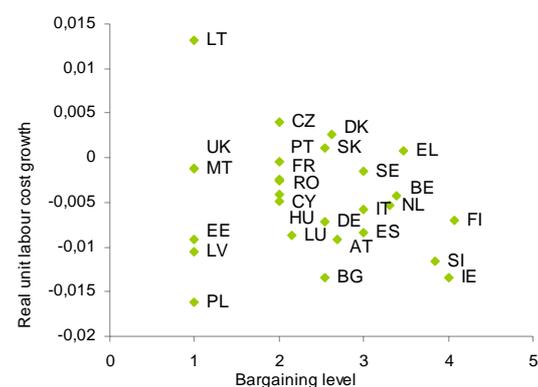
Traxler and Kittel 2000; Calmfors and Driffill, 1988), the position of the country along the trade-off between wage setting centralisation and coordination is among the most relevant identification criteria of alternative models.

Due to the strong correlation across wage setting characteristics, disentangling the effect on wage outcomes poses a series of difficulties. There is broad agreement that research so far managed only to a certain extent to demonstrate a strong and robust pattern of relations between wage bargaining characteristics and wage outcomes (e.g. Aidt and Tzannatos, 2002; Flanagan, 1999). For instance, empirical evidence on aggregate data shows that the degree of centralisation matters for the distribution of wages (more centralised bargaining allows for less differentiation at sectoral or firm level), while the impact on aggregate developments is less clear-cut (e.g. OECD, 2004). Recent evidence on individual wage data from EU countries finds instead a significant role of bargaining de-centralisation (as measured by the incidence of firm-level bargaining) on the occurrence of downward real wage rigidity episodes (Messina et al., 2010).

Prima facie evidence does not show a strong link between collective bargaining characteristics and wage outcomes. Graph III.4.4 plots average indicators of bargaining centralisation against the growth rate of RULCs over the 1995-2007 period for a cross-section of EU countries. The graph does not reveal any significant pattern. This prima facie evidence does not support the view that in

more centralised wage setting systems real wages tend to grow above productivity. The relation appears instead to be negative but very weakly so, between centralisation and the apparent elasticity of real wages to labour productivity (Graph III.4.5). This suggests that the degree of centralisation could matter for the extent to which real wages respond to changes in productivity. This evidence however cannot be taken as conclusive in light of the small sample and since other wage determinants are not properly controlled for.

Graph III.4.4: **Level of bargaining and growth in real unit labour costs, EU27, average 1995-2007**

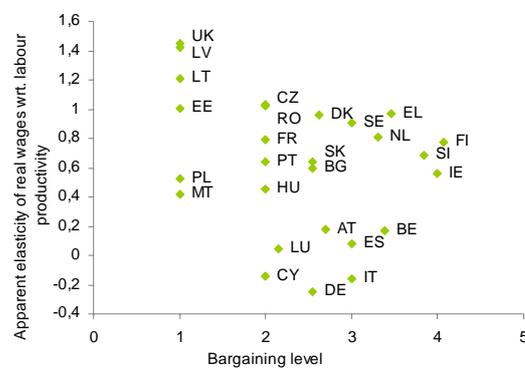


Source: Commission services elaboration.

After controlling for wage determinants via econometric wage equations, there is no impact of collective bargaining characteristics on short term wage developments. Table III.A3.1 shows that, when added to a long-run equation, bargaining

characteristics have no explanatory power. This evidence suggests that changes in collective bargaining elements do not affect the level of the wage after controlling for other factors. The inclusion of the same bargaining characteristics in Error Correction Model regressions reveals that a change in those elements induces no short-term impact on wages (Table III.A3.2).

Graph III.4.5: **Level of bargaining and apparent elasticity between real wage and labour productivity, average EU27, 1995-2007**



Source: Commission services elaboration.

Over the longer term, wage levels show some association with bargaining characteristics, notably with the elements affecting bargaining coverage. This is understood by via the estimation of wage equations in cross-country regressions. Table III.A3.3 shows that after controlling for unemployment and productivity countries with the highest bargaining coverage tend to have significantly higher real wages, while countries with higher union density tend to exhibit lower wages. As for the level of bargaining, it shows a weak concave relation in line with the predictions of the Calmfors and Driffill (1998) model (revealed by the negative sign of the squared bargaining level indicator). This result is however not robust with respect to the inclusion of the wage coordination and bargaining coverage indicators. When both elements are controlled for, the relation between real wages and the bargaining level turns convex. All in all, elements of the wage setting frameworks affecting bargaining coverage at given union density, notably extension mechanisms, appear to be associated significantly and robustly with higher wage levels in cross-country analysis.

Several aspects of the bargaining framework appear to have a role in shaping the response of wages to structural determinants. Table III.A3.4 reports results from the estimation of long-run wage equations for different country groups. By splitting the sample between countries with a high vs. a low degree of bargaining centralisation it appears that the bargaining level may matter for the responsiveness of wages to shocks.⁽⁴⁶⁾ In more centralised settings the response to unemployment and to terms of trade appears insignificant. Columns 5 to 8 of the table display results for a sample split according to the degree of wage coordination.⁽⁴⁷⁾ In line with expectations, in coordinated settings there is a stronger response to unemployment (the response to unemployment has a sign opposite to what expected in uncoordinated settings) and a weaker one to labour productivity. The result can be interpreted in light of the stronger dependency of wage outcomes on the determinants of central union confederations' bargaining power in centralised wage settings: with high (low) unemployment, wage setters will more likely ask for wage growth below (above) productivity when coordination is high. Finally, the sample is split between countries characterised by the presence of automatic indexation mechanisms either established by law or by collective bargaining throughout most of the sample period and the rest. It appears, in line with expectations, that the countries with indexations systems exhibit on average a weaker reaction of wages to unemployment and terms of trade, after controlling for their response to prices and productivity.⁽⁴⁸⁾ A broadly consistent picture emerges from the estimation of Error Correction regressions for the same sample splits (Table III.A3.5).

⁽⁴⁶⁾ The groups are defined as those countries where the average centralisation indicator over the 1995-2007 period was above or below the median average value, see footnote to Table 9 for the list of countries in the two groups).

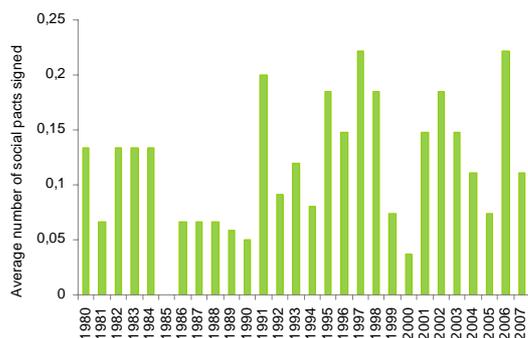
⁽⁴⁷⁾ As coordination is highly intertwined with centralisation, the split is performed only for countries with intermediate degree of centralisation (sectoral or industry level, eventually with additional company level bargaining) and distinguishes two polar group of countries: those with coordination achieved via national level agreements and pattern bargaining (highest two values of the coordination index) versus those countries with fragmented and uncoordinated bargaining or weak enforceability of industry agreements (lowest 2 values of the coordination index).

⁽⁴⁸⁾ See also Lunnemann and Wintr (2010) for evidence on the effect of wage indexation using micro wage data.

Social pacts and wage agreements may be effective in driving wage outcomes in the short to medium term. Overall, the results in Table III.A3.6 are in line with existing studies, since it appears that wage bargaining characteristics institutions have no strong or robust implications for wage levels or growth, notably in the short term, but could matter for wage responsiveness. In some occasions, however, wage growth targets or ceilings could be explicitly mentioned in collective bargaining, not only in national level wage agreements but also via the operation of so-called social pacts, i.e. publicly announced formal policy commitments agreed between the government and the social partners with a view to address specific issues of achieve pre-defined targets (Avdagic, 2008).

Reforms in the bargaining framework depend on cooperative and effective social dialogue. Developments in wage bargaining frameworks could have played a role in driving wage outcomes in some countries, but the success of reforms in collective bargaining depends on a series of factors, including the context for social dialogue. For instance, a non automatic application of the extension mechanism, increased frequency of firm-level bargaining at firm level, the effective use opening clauses partially explain the German wage moderation performance. Also in Spain an increasing number of workers took advantage of these clauses in 2010 (7-15% according to the figures of the Ministry of Labour Affairs and the Spanish Statistical Institute). However, in other countries, legislative changes encouraging firm-level bargaining (e.g. Portugal) were so far less effective in influencing outcomes.

Graph III.4.6: Average number of social pacts concluded per year across EU27 countries)



Source: ICTWSS database.

Graph III.4.6 suggests that social pacts became frequent in a series of countries notably in the run-up to EMU, as an instrument to foster nominal convergence. Some social pacts and national wage agreements include explicit ceilings for wage increases. By augmenting a wage equation with a lagged indicator taking value 1 whenever such type of social pact or national wage agreement was signed it appears that wages were negatively affected within a 3-year time horizon, with a borderline level of statistical significance. The evidence supports the view that those instruments may be in driving wage outcomes in the short run if effectively implemented.

5. CONCLUSIONS

Assessing the implications of wage developments for macroeconomic imbalances requires a proper understanding of the relevant links and transmission channels. Labour costs are largely driven by the market mechanism and interact with the rest of the economy. In particular, nominal wages are jointly determined with price levels, productivity, and unemployment. In monetary unions, competitiveness plays an adjustment role in the presence of asymmetric shocks. Current account imbalances, wages, and competitiveness may be driven by common determinants, notably cross-border financial flows. A simplistic view according to which labour costs move exogenously and cause imbalances should be avoided, while a good understanding of the complex interlinks between wages, competitiveness and imbalances is needed.

The comparison of actual wage trends with appropriate benchmarks is a first screening for assessing wage developments, and a full-fledged analysis requires disaggregated data at sectoral, regional, skill level.

- The comparison of real wage growth with productivity growth provides information on whether wage developments are consistent with the maintenance of balanced labour market conditions.
- Comparing nominal wage growth with that that would be consistent with the maintenance of a constant ULC-based REER provides a prima-facie assessment whether wage growth is in line with orderly developments in current accounts.
- Depending on the specific context, wages may be evolving according to standard market-driven relations with fundamentals or could instead be driven by temporary or more structural shocks driven by policy, technology, or factors underlying parties bargaining power in collective agreements. Comparing actual wages with those obtained from predictions from estimated wage equations permits to shed light on this aspect.

Concerning the analysis of the effects of policies and reforms in wage setting institutions, the

conclusions from the analysis in this part of the report can be summarised as follows:

- Policy action in the form of statutory minimum wages, government wages, labour taxes can have a direct impact on labour cost developments, whose overall impact on competitiveness and imbalances may depend also on other relevant transmission channels. Moreover, the government can play a role in driving wage outcomes via the conclusion of wage pacts.
- Despite the assessment of the implications of wage bargaining characteristics on wage developments is notoriously complex and there is no strong evidence in support of a single, superior wage setting model, analysis carried out in the present report supports the view that: (a) selected wage bargaining elements, notably affecting bargaining coverage, can have a significant impact on wage outcomes over the medium-to-long term; (b) There are aspects of the wage bargaining system that matter for the extent to which wages respond to fundamental, notably unemployment and the terms of trade. These are: (i) the degree of centralisation bargaining, (ii) the coordination of wage setting, (iii) the presence of automatic indexation clauses.
- The analysis also suggests a number of conclusions for future labour market reforms that aim at affecting wage outcomes:
- Reforms aimed at promoting a quick correction of wage developments should be distinguished from those aimed at revising the framework conditions where wage formation takes place. Regarding the former, policy action should target tax wedges, government wages, minimum wages. The promotion of social pacts and tripartite agreements on wages could also be considered. As for the more general issue of the mechanics of wage formation, reforms could concern concrete aspects of the wage setting system.
- Reforms intended to achieve a rapid correction of competitiveness (e.g. tax wedge cuts) need to take into account the complexity of feedbacks and interactions (not only direct effects

on relative prices, but also effects on domestic demand, budgetary effect etc.) and cross-country spillovers.

- Reforms concerning selected aspects of the wage setting system need to take into account: (i) the tools that are at the disposal of the government to induce the desired change in the system, since many aspects of wage bargaining are a matter of practice followed by social partners rather than law; (ii) the systemic nature of the wage setting system and the repercussions that reforms in one part trigger in other parts of the wage setting framework (e.g. the implications of reforms in the extension mechanism for the extent of wage coordination, the implications of the elimination of indexation systems for contract duration and renewal...); (iii) the relevance of a cooperative social dialogue for reforms whose success depends also on the practice followed by social partners in collective bargaining (e.g. the effective use of opening clauses in sectoral agreements, reforms aimed at supporting bargaining at firm level...).

APPENDIX 1

Estimating wage equations

In analogy with existing work (e.g. Nickell, 1988; Manning, 1993; Bell, Nickell, Quintini, 2002; Nunziata, 2005) the estimated dynamic wage equation can be obtained as a reduced form specification incorporating both demand and supply-side labour market determinants. Nominal wages are assumed to be related to the price level, labour productivity, and unemployment.

- Price levels matter for both labour demand and labour supply. Firms are willing to offer higher wages if the price of their own output is higher; wage setters demand higher wages if the cost of living is higher. In principle, both product and consumption prices could be included in the equation. In light of the high collinearity of the two variables, only the price level variable that performed best, the CPI index was kept.
- Labour productivity is aimed at capturing labour demand: the higher the productivity of labour at given price level, the higher the nominal wages firms are willing to pay.
- The unemployment rate captures mostly supply-side determinants, as wage demands by unions are expected to become more moderate in the presence of higher unemployment.

The dynamic relationship between nominal wage growth and the explanatory variables is specified as an error-correction model. This assumes that there is an equilibrium relationship between the nominal wage level, the price level, the unemployment rate and labour productivity to which nominal wages will converge even if there are transitory shocks that divert wages from this equilibrium. Note that such a framework does not exclude the possibility of reverse causation (e.g. wages affecting prices) and multiple long-run relations among the variables. It does not address the endogeneity of the labour productivity variable either.

This wage equation is estimated for a panel of countries using yearly data. The long-run equilibrium relationship is specified as:

$$\ln(\text{wage}_{it}) = \alpha_i + \beta_1 \ln(\text{CPI}_{it}) + \beta_2 \ln(u_{it}) + \beta_3 \ln(\text{productivity}_{it}) + e_{it} \quad (1)$$

where i and t index the countries and time, wage denotes nominal compensation per employee, CPI is the consumer price index, u is the unemployment rate, productivity is the GDP per total employment and e is the disturbance and α_i is a fixed effect.

In addition to the above basic specification, also specifications including terms trade (higher terms of trade expected to be reflected in higher wages, other things being equal) are estimated. Alternative specifications are also estimated using as explanatory variable real wages and dropping the price level from the list of the explanatory variables.

Given that wage and CPI are non-stationary variables (1) can be estimated as a co-integrating relationship. The satisfactory fit of the equilibrium relationship and the highly significant error correction terms both indicate that one can assume co-integration among the variables in (1). For this reason, and in light of the limited power of available panel integration and cointegration tests, those tests were not performed.

The dynamic wage equation is specified as:

$$\Delta \ln(\text{wage}_{it}) = \mu_i + \theta_1 \Delta \ln(\text{CPI}_{it}) + \theta_2 \Delta \ln(u_{it}) + \theta_3 \Delta \ln(\text{productivity}_{it}) + \gamma \widehat{e}_{it-1} + \varepsilon_{it} \quad (2)$$

where \widehat{e}_{it-1} is the residual from (1) and therefore γ measures the speed of adjustment to a random shock.

When interpreting the parameters of (1) and (2) one should be aware that they capture both demand and supply-side effects.

The dataset consists of the 27 EU countries and observations range between 1980 and 2010 resulting in an unbalanced sample. For robustness check the estimation results are also presented for a larger set of countries, the euro area and adding terms of trade (National accounts definition, 2000=100, source: AMECO) as an explanatory variable. In all cases a fixed effect estimator is used and standard errors are clustered according to the panel identifier. The results are presented in Tables III.A3.7 and III.A3.8.

Description of variables in the wage equation

Variable	Definition
<i>wage</i>	Nominal compensation per employee, total economy, local currency unit, source: AMECO.
<i>CPI</i>	National CPI (All-items); 2000=100, source: AMECO.
<i>u</i>	Unemployment rate, source: Eurostat.
<i>productivity</i>	Calculated as GDP over total employment. The GDP variable is at 2000 market prices; local currency unit, source: AMECO. The total employment variable is from OECD, complemented by Eurostat employment (15-64 years) figures if the former is missing.
<i>Terms of trade</i>	Terms of trade index, 2000=100 Source: AMECO

APPENDIX 2

Description of ICTWSS indicators

Table III.A2.1: Description of ICTWSS indicators of wage setting institutions

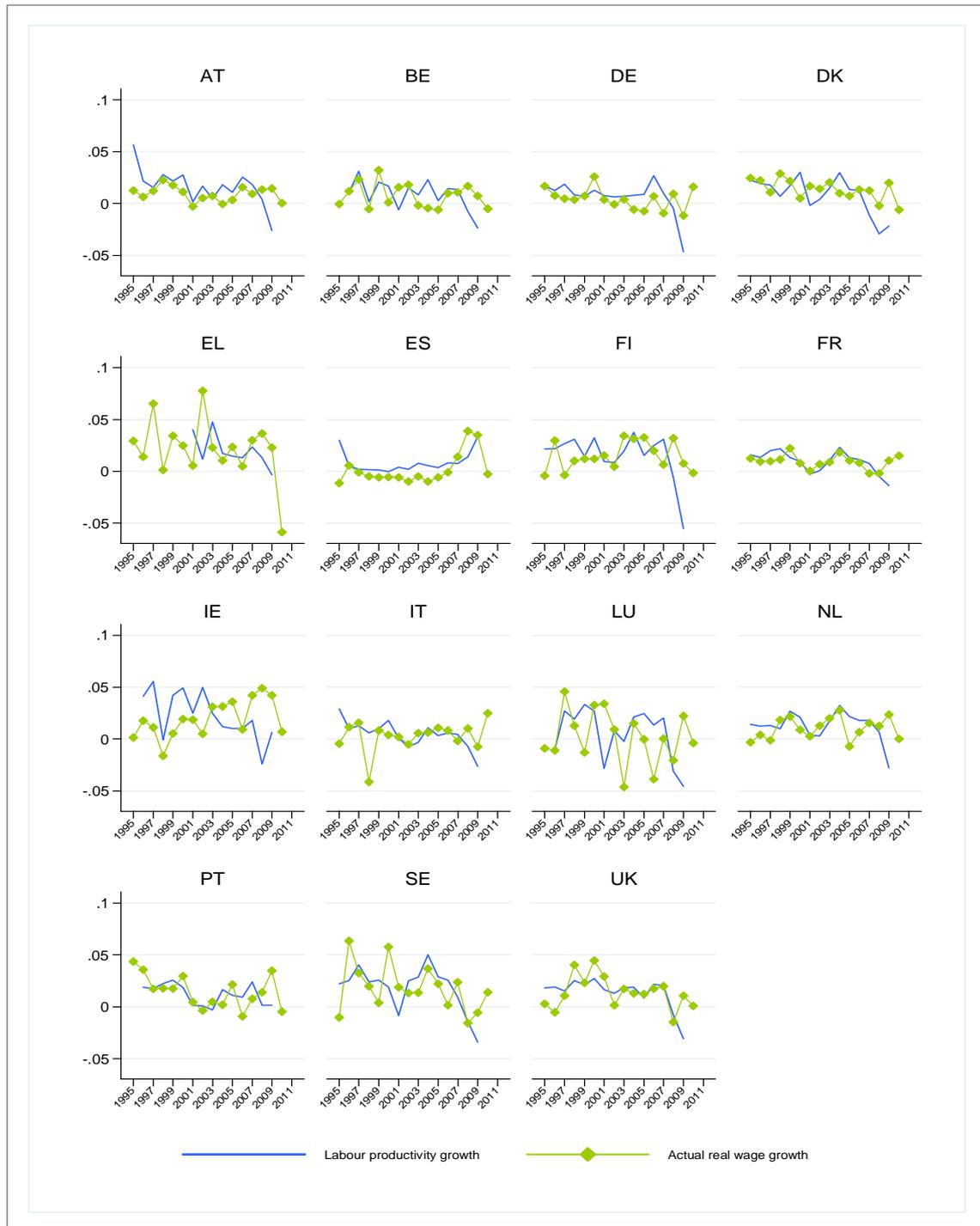
ICTWSS variable	Description
Union Density	Net union membership as a proportion wage and salary earners in employment, calculated as $(0-100) = \text{NUM} * 100 / \text{WSE.E}$
Coordination of wage bargaining	<p>5 = economy-wide bargaining, based on a) enforceable agreements between the central organisations of unions and employers affecting the entire economy or entire private sector, or on b) government imposition of a wage schedule, freeze, or ceiling.</p> <p>4 = mixed industry and economy-wide bargaining: a) central organisations negotiate non-enforceable central agreements (guidelines) and/or b) key unions and employers associations set pattern for the entire economy.</p> <p>3 = industry bargaining with no or irregular pattern setting, limited involvement of central organizations and limited freedoms for company bargaining.</p> <p>2 = mixed industry- and firm level bargaining, with weak enforceability of industry agreements</p> <p>1 = none of the above, fragmented bargaining, mostly at company level</p>
The dominant level(s) at which wage bargaining takes place	<p>5 = national or central level</p> <p>4 = national or central level, with additional sectoral / local or company bargaining</p> <p>3 = sectoral or industry level</p> <p>2 = sectoral or industry level, with additional local or company bargaining</p> <p>1 = local or company bargaining</p>
Minimum Wage Setting	<p>0 = No national (cross-sectoral or inter-occupational) minimum wage;</p> <p>1 = Minimum wages are set by collective agreement or tripartite wage boards in (some) sectors;</p> <p>2 = Minimum wages are set by national (cross-sectoral or inter-occupational) agreement (“autonomous agreement”) between unions and employers;</p> <p>3 = National minimum wage is set by agreement (as in 2) but extended and made binding by law or Ministerial decree;</p> <p>4 = National minimum wage is set through tripartite negotiations;</p> <p>5 = National minimum wage is set on fixed rule (index-based minimum wage) after negotiations or consultations with by the social partners;</p> <p>6 = National minimum wage is set by government, but after (non-binding) tripartite consultations;</p> <p>7 = National minimum wage set by judges or expert committee, as in award-system;</p> <p>8 = National minimum wage is set by government, without fixed rule.</p>
Bargaining coverage, adjusted	Employees covered by wage bargaining agreements as a proportion of all wage and salary earners in employment with the right to bargaining, expressed as percentage, adjusted for the possibility that some sectors or occupations are excluded from the right to bargain; ranges from 0 to 100.
Social pact	A (tripartite) social pact between the government, the unions and the employers, or between the government and the unions, is reached and signed in specified year. Values: 0 = no; 1 = yes; 2 = two pacts in same year; 3 = three pacts in same year etc
Wage maximum in the social pact	The pact or agreement also contains a norm or ceiling regarding maximum wage rise; 1 if true, 0 if false.

Source: Jelle Visser, 2009. The ICTWSS Database: Database on Institutional Characteristics of Trade Unions, Wage Setting, State Intervention and Social Pacts in 34 countries between 1960 and 2007. Amsterdam Institute for Advanced Labour Studies AIAS, University of Amsterdam.

APPENDIX 3

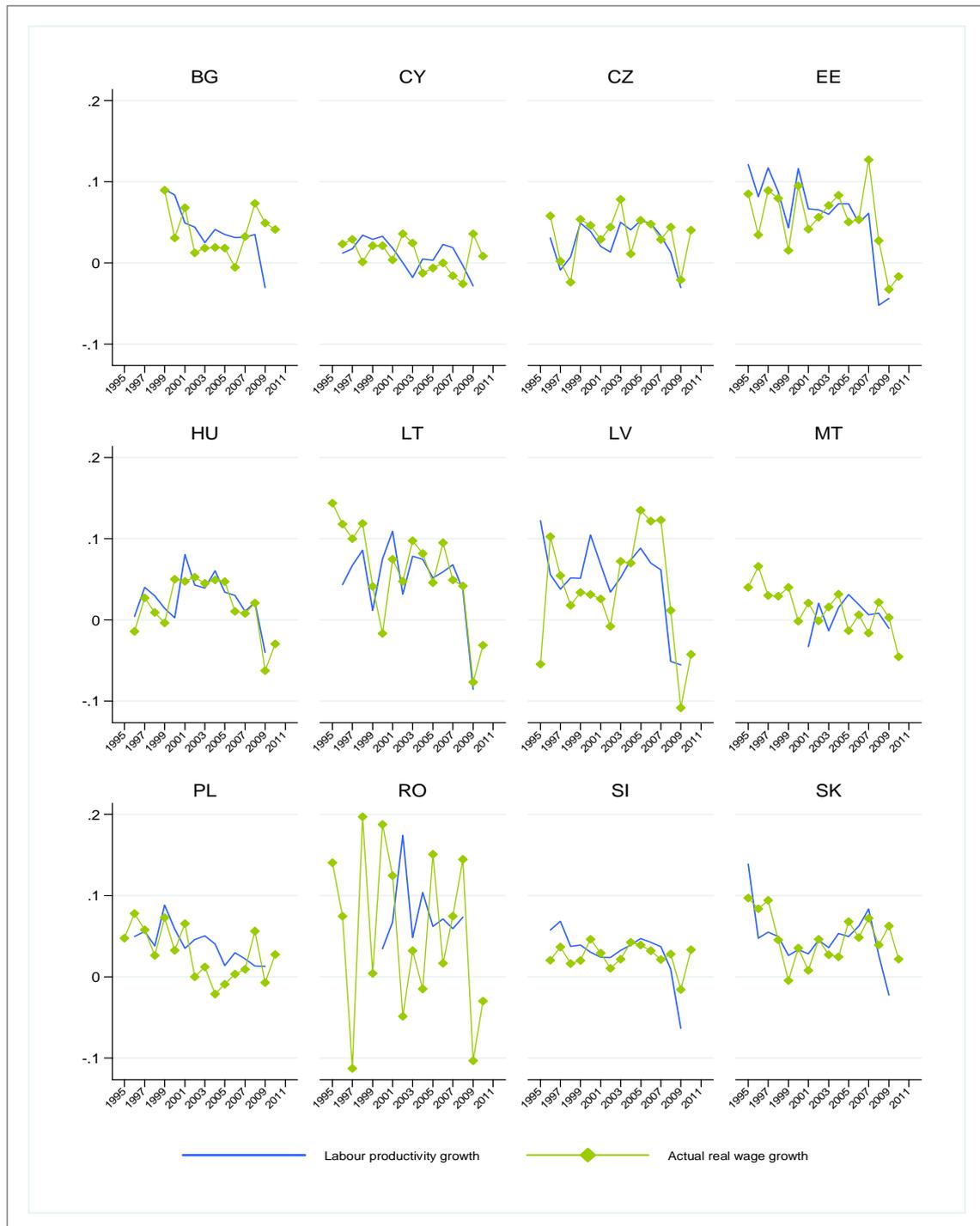
Regression analysis results

Graph III.A3.1: **Benchmark for real compensation per employee growth: labour productivity growth, EU15**



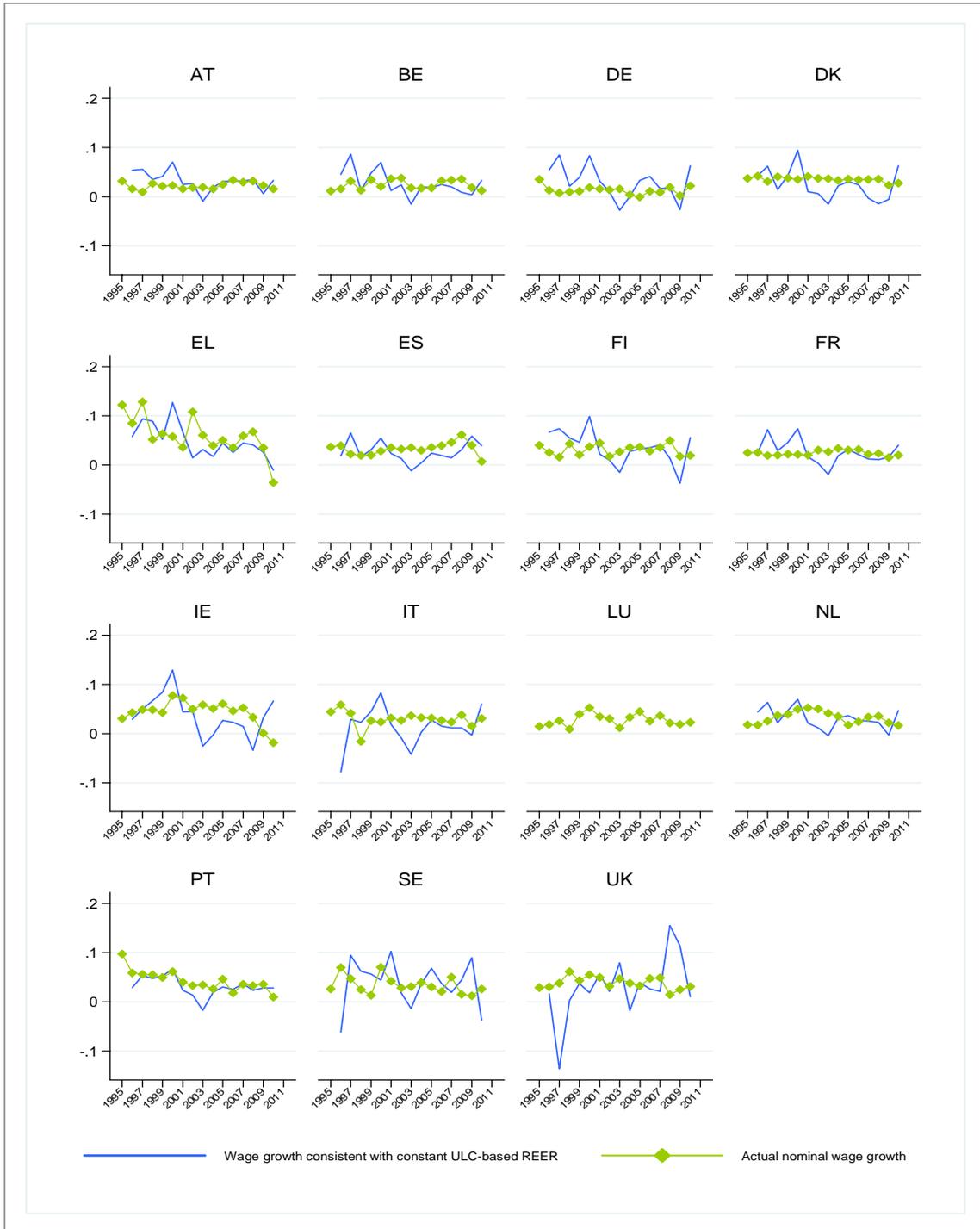
Source: Commission services.

Graph III.A3.2: **Benchmark for real compensation per employee growth: labour productivity growth, New Member States**



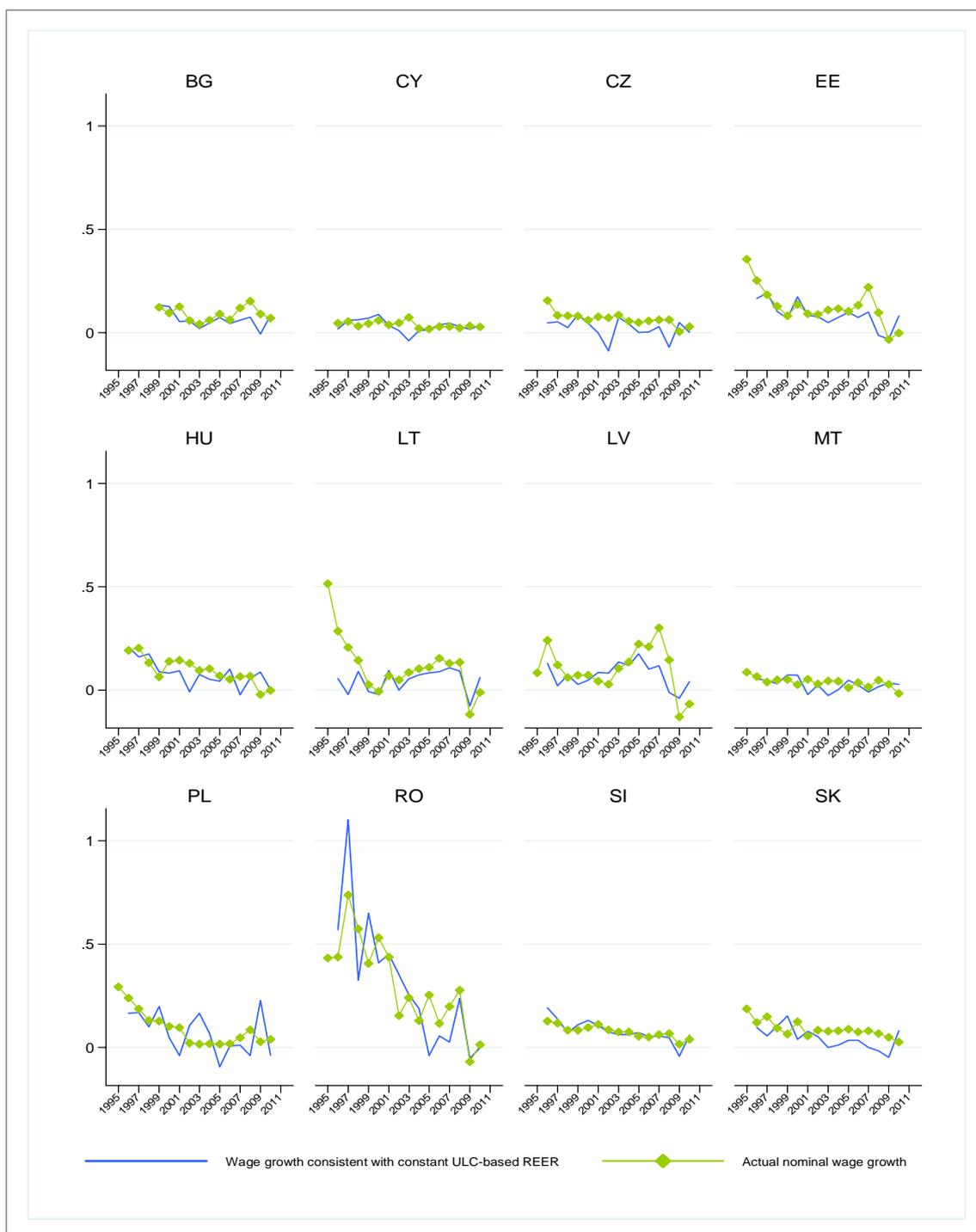
Source: Commission services.

Graph III.A3.3: Benchmark for nominal compensation per employee growth: constant ULC-based REER, EU15



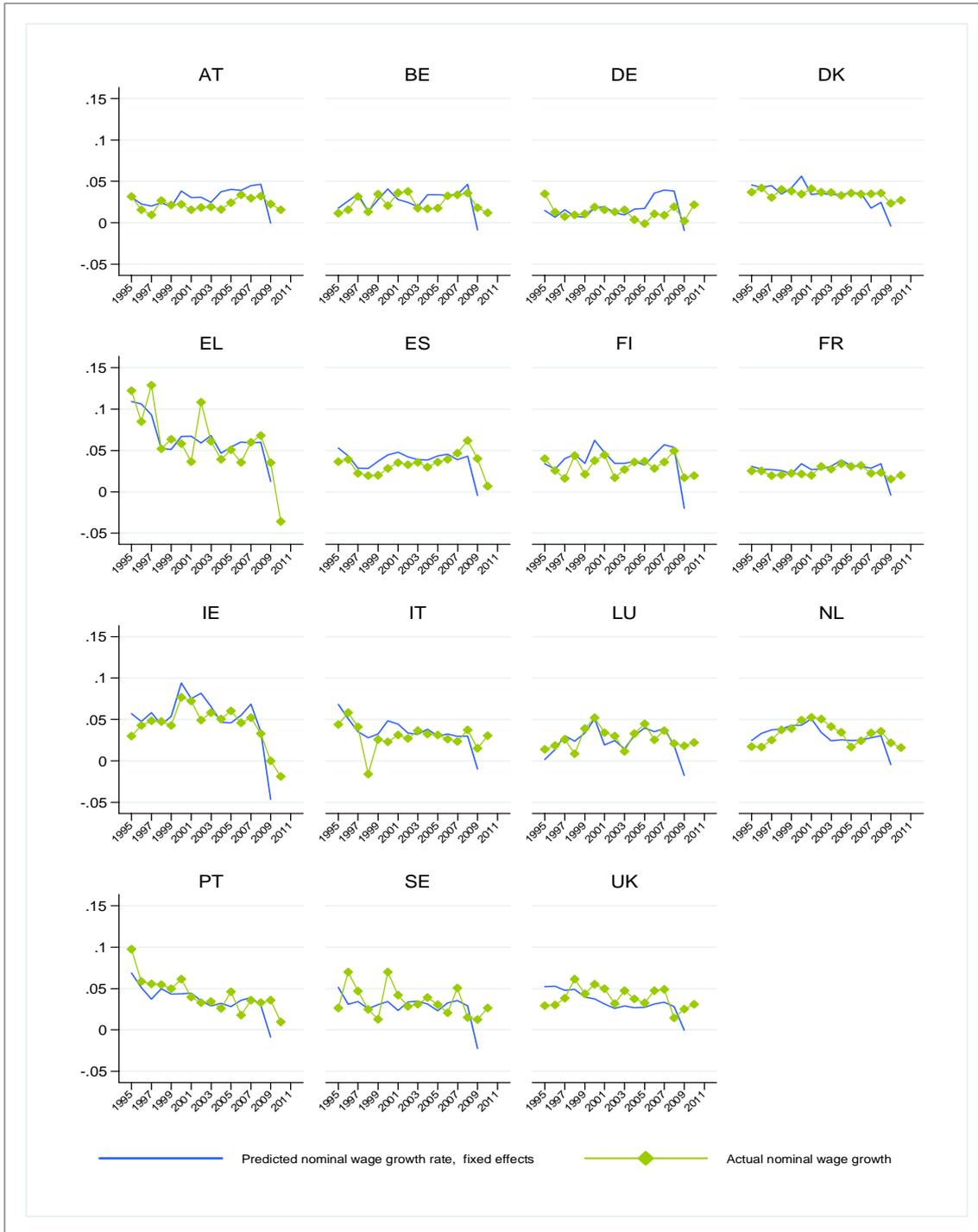
Source: Commission services.

Graph III.A3.4: **Benchmark for nominal compensation per employee growth: constant ULC-based REER, New Member States**



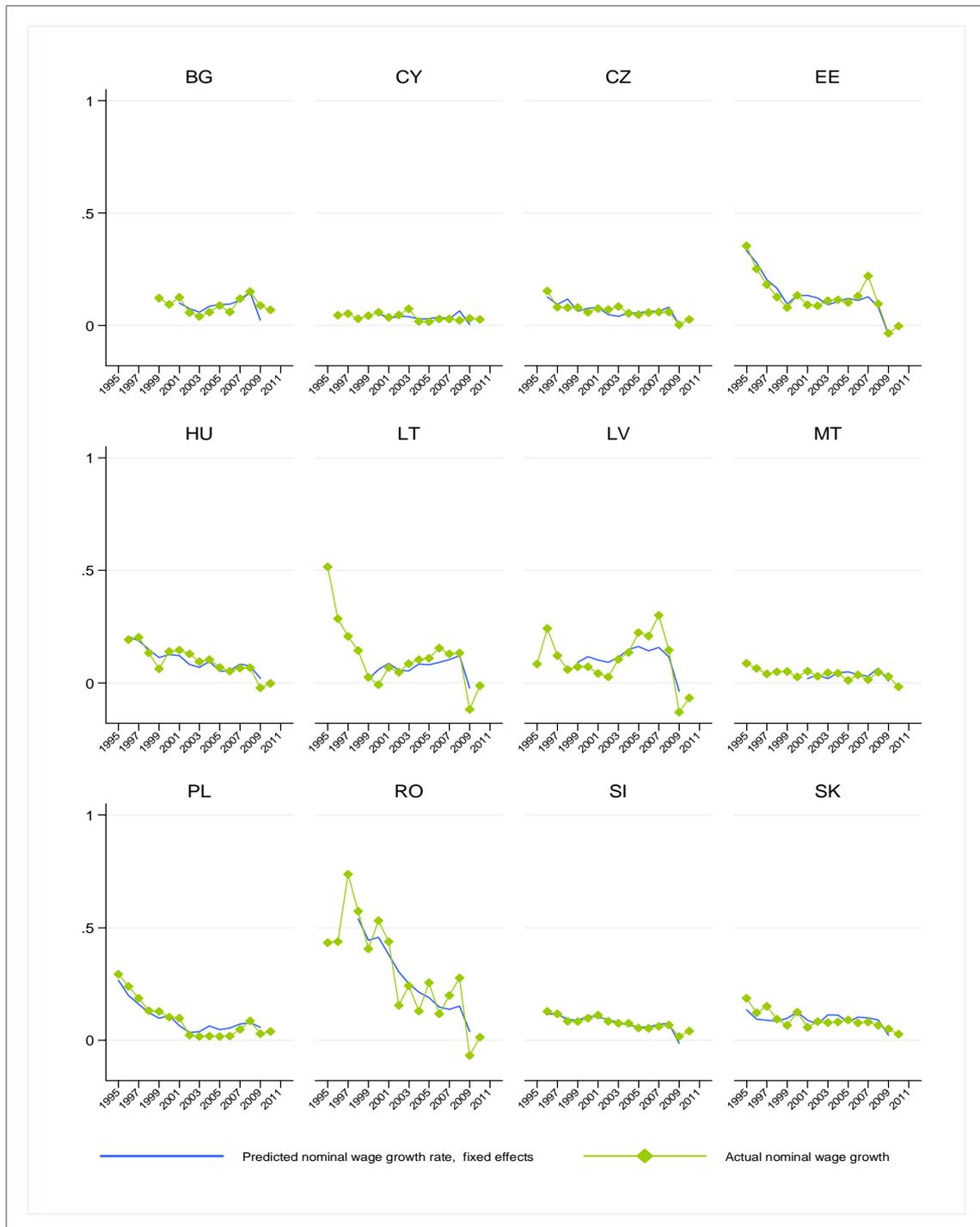
Source: Commission services.

Graph III.A3.5: Benchmark for nominal compensation per employee growth: prediction from wage equation, EU15



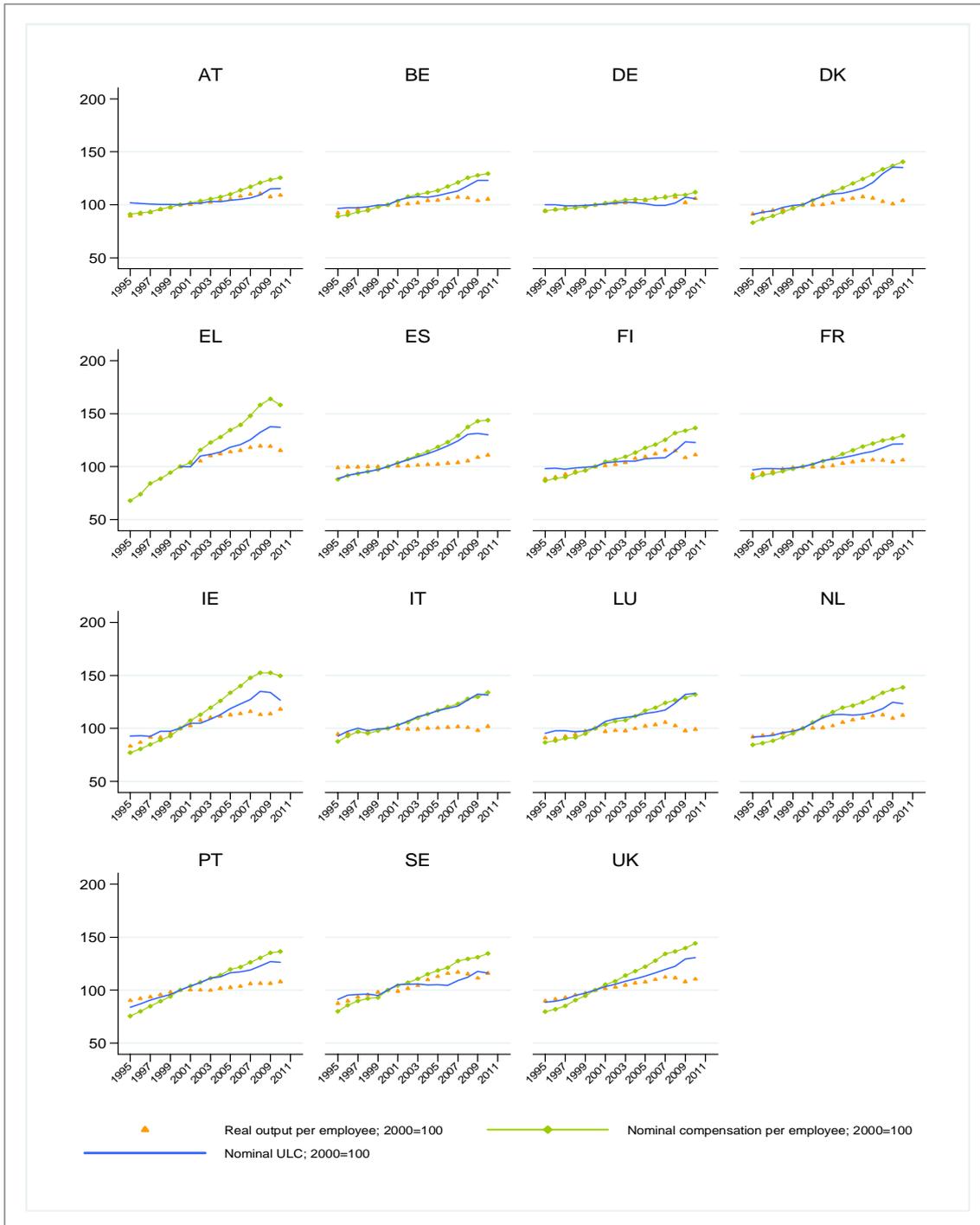
Source: Commission services.

Graph III.A3.6: **Benchmark for nominal compensation per employee growth: prediction from wage equation, New Member States**



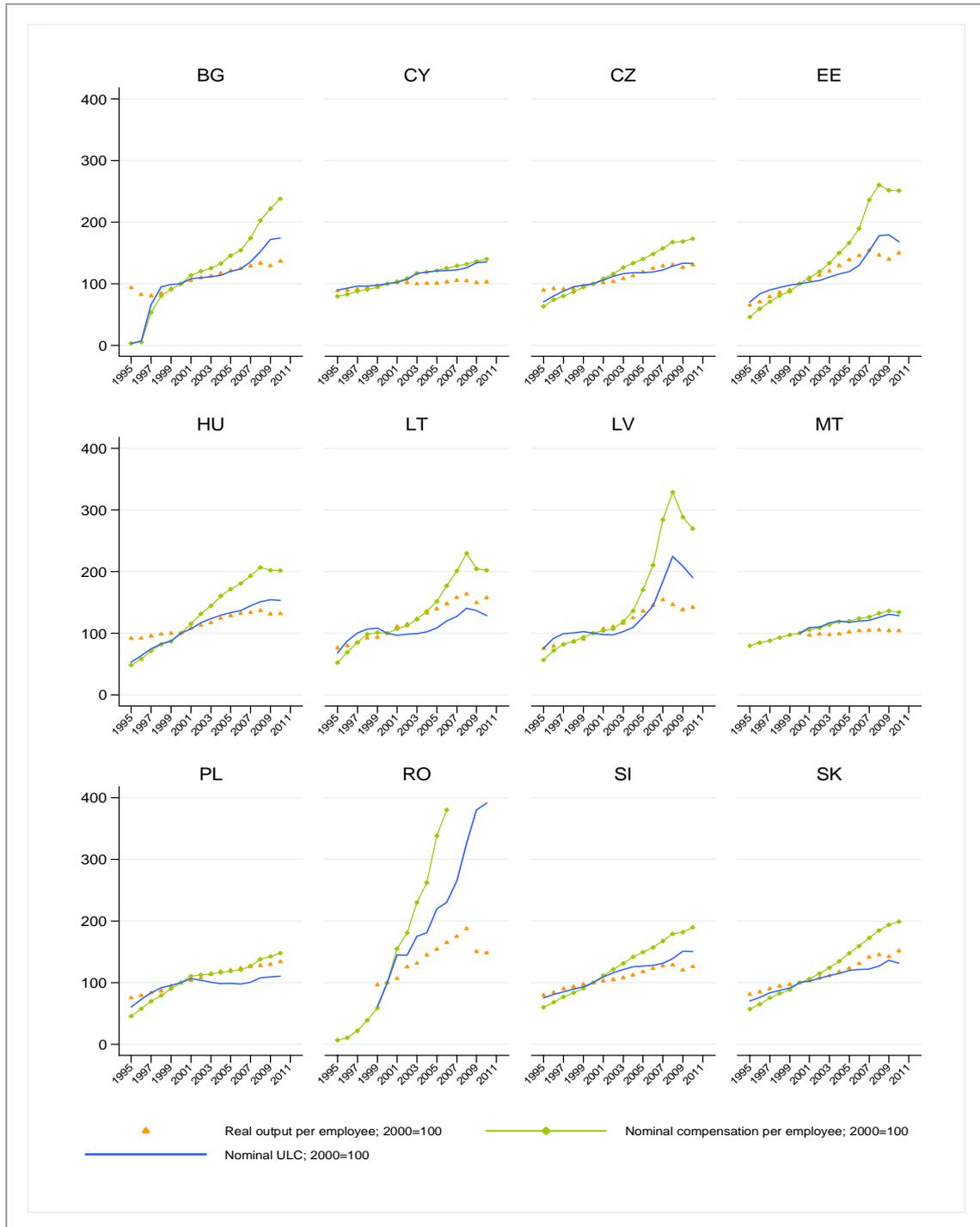
Source: Commission services.

Graph III.A3.7: Unit labour cost, nominal compensation per employee and labour productivity indices EU15 (index numbers, 2000=100)



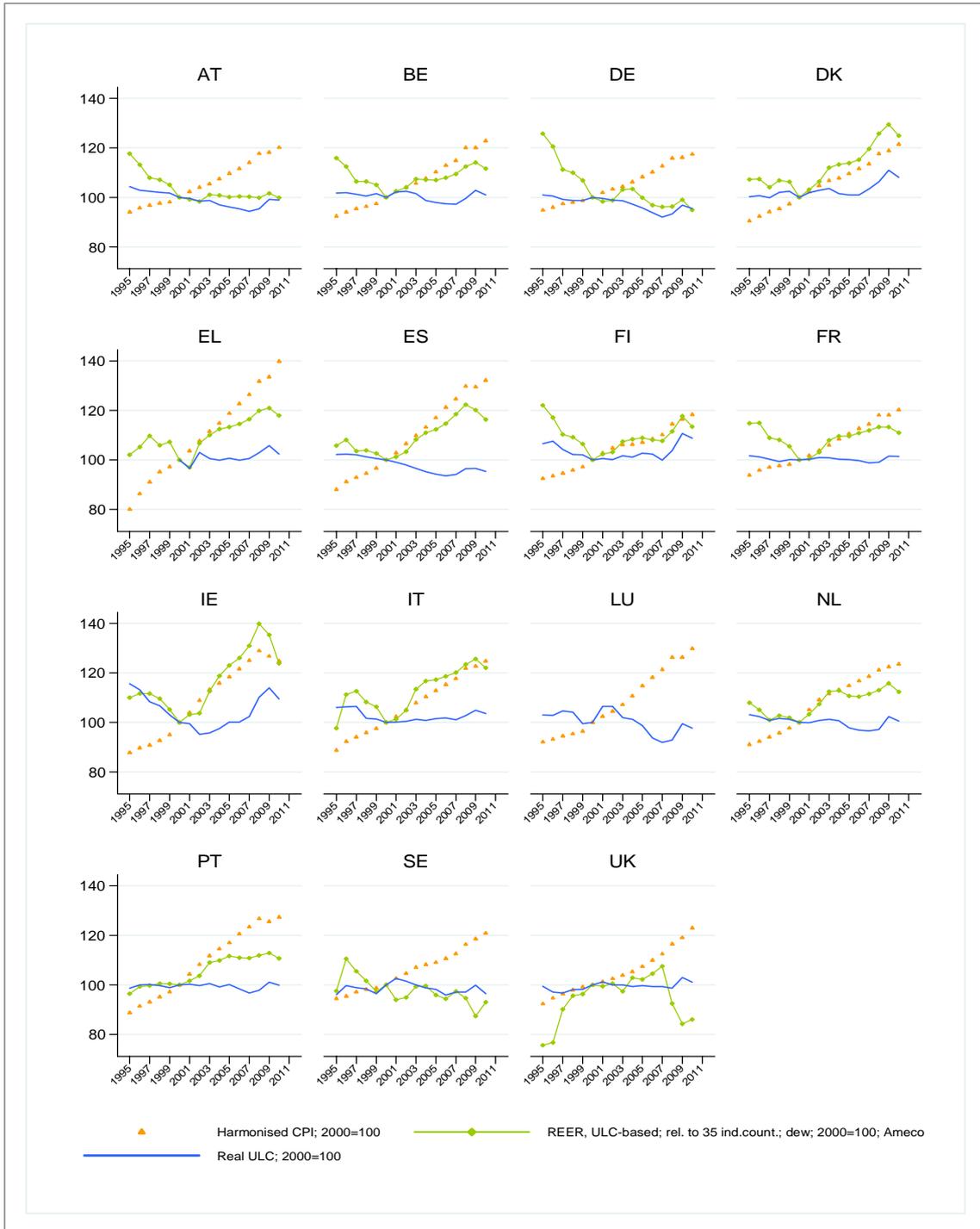
Source: Commission services.

Graph III.A3.8: **Unit labour cost, nominal compensation per employee and labour productivity indices New Member States (index numbers, 2000=100)**



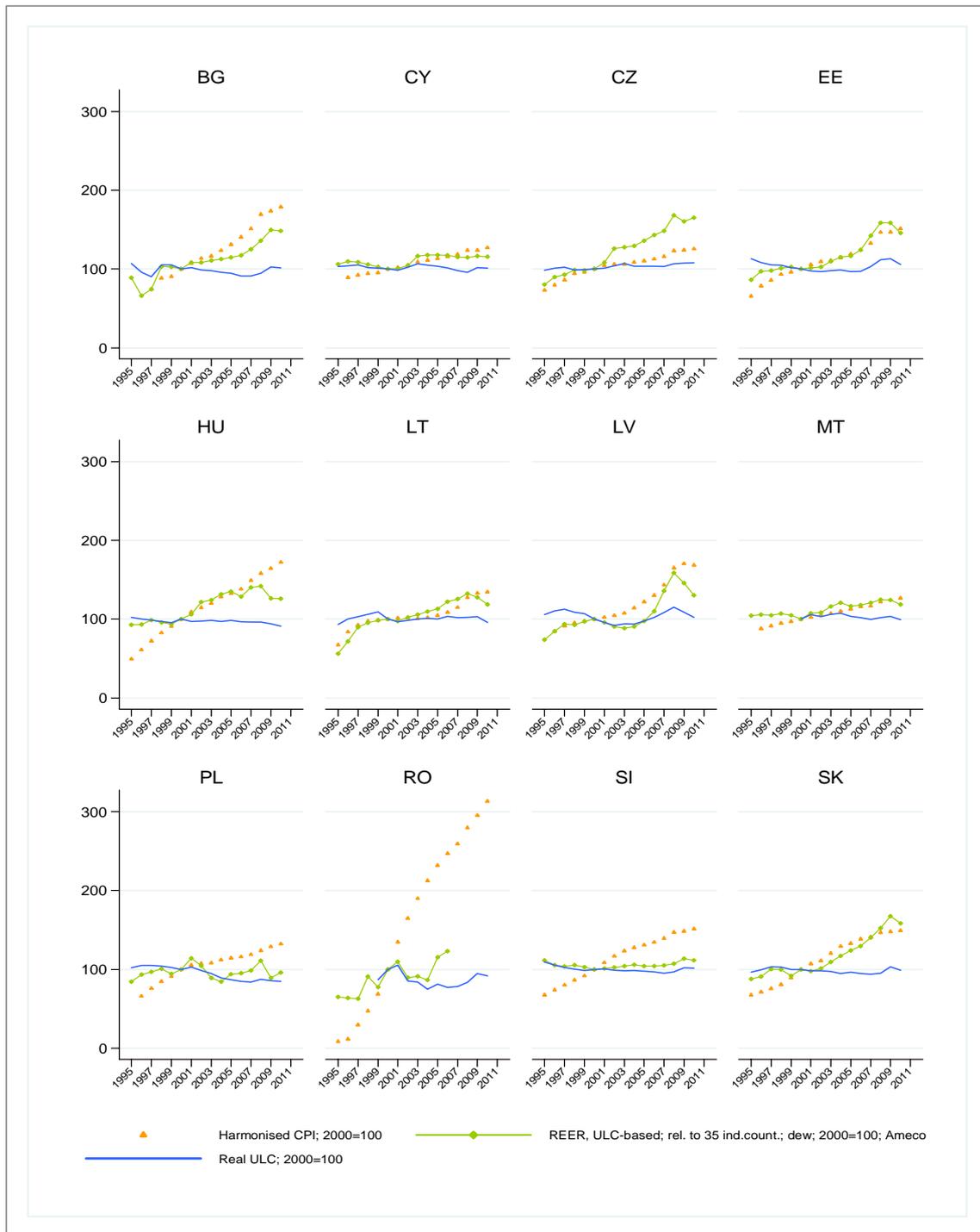
Source: Commission services.

Graph III.A3.9: REER, price levels, real unit labour costs, EU15, (index numbers, 2000=100)



Source: Commission services.

Graph III.A3.10: REER, price levels, real unit labour costs, New Member States, (index numbers, 2000=100)



Source: Commission services.

Table III.A3.1: **Wages and institutions: evidence from long-run wage equations, various samples, 1980-2007**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Dependent variable: log of real compensation per employee	EU countries						OECD countries
Explanatory variables							
Unemployment rate	-0.00529*	-0.00548+	-0.00760**	-0,00508	-0,00513	-0.00761**	-0.00735**
	[0.00251]	[0.00284]	[0.00213]	[0.00302]	[0.00302]	[0.00213]	[0.00200]
Log labour productivity	0.880**	0.885**	0.841**	0.899**	0.899**	0.866**	0.874**
	[0.0881]	[0.0745]	[0.0666]	[0.0836]	[0.0836]	[0.104]	[0.102]
Union Density	0,001					0,000359	0,000736
	[0.00251]					[0.00279]	[0.00289]
Bargaining coordination		-0,0171				0,00115	0,00519
		[0.0165]				[0.00724]	[0.00754]
Bargaining coverage			0,00111			0,00125	0,00155
			[0.00180]			[0.00154]	[0.00131]
Bargaining level				0,00237	-0,0217	-0,00861	0,0427
				[0.00541]	[0.0213]	[0.0169]	[0.0465]
Bargaining level squared					0,00384	0,00255	-0,00685
					[0.00336]	[0.00280]	[0.00811]
Constant	1.860**	1.937**	1.911**	1.863**	1.895**	1.859**	1.792**
	[0.178]	[0.0904]	[0.136]	[0.104]	[0.107]	[0.228]	[0.241]
Observations	285	308	251	308	308	245	326
R-squared	0,852	0,85	0,849	0,847	0,847	0,849	0,819
Number of countries	27	27	24	27	27	24	31

(1) Estimation method: Least Square Dummy Variables. See Appendix 1 and 2 for the definition of the variables. Robust standard errors in brackets. Clustering of standard errors by country** p<0.01, * p<0.05, + p<0.1.

Source: Commission services.

Table III.A3.2: **Wages and institutions: evidence from Error Correction Models, various samples, 1980-2007**

Explanatory variables	(6)	(7)
	EU countries	OECD countries
Dependent variable: $\Delta \log$ of real compensation per employee		
Δ Unemployment rate	-0,000467 [0,00162]	-0,00191 [0,00178]
$\Delta \log$ labour productivity	0,562** [0,125]	0,454** [0,128]
Error correction term	-0,138* [0,0531]	-0,0767+ [0,0449]
Union Density	-0,000161 [0,000725]	0,000402 [0,000476]
Bargaining coordination	0,00363 [0,00416]	0,00235 [0,00248]
Bargaining coverage	-0,000536 [0,000906]	-0,000584 [0,000772]
Bargaining level	-0,0165+ [0,00828]	-0,00551 [0,0133]
Bargaining level squared	0,00303* [0,00117]	0,000867 [0,00213]
Constant	0,0581 [0,0645]	0,0311 [0,0472]
Observations	221	321
R-squared	0,198	0,151
Number of countries	24	31

(1) Estimation method: Least Square Dummy Variables. See Appendix 1 and 2 for the definition of the variables. Robust standard errors in brackets. Clustering of standard errors by country** p<0.01, * p<0.05, + p<0.1.

Source: Commission services.

Table III.A3.3: **Wages and institutions: evidence from cross section regressions, 1995-2007**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Dependent variable: log of real compensation per employee in 2000 euros							
			EU countries				OECD countries
Explanatory variables							
Unemployment rate	-0.0122** [0.00202]	-0.0112** [0.00210]	-0.00998** [0.00195]	-0.0112** [0.00209]	-0.0111** [0.00215]	-0.0126** [0.00164]	-0.0126** [0.00159]
Log labour productivity	1.053** [0.0113]	1.038** [0.0110]	1.025** [0.0140]	1.041** [0.0119]	1.041** [0.0120]	1.030** [0.0117]	1.062** [0.00900]
Union Density	-0.00150** [0.000234]					-0.00235** [0.000264]	-0.00275** [0.000263]
Bargaining coordination		0.0109+ [0.00580]				0.0188* [0.00738]	0.0156** [0.00567]
Bargaining coverage			0.00205** [0.000358]			0.00330** [0.000419]	0.00218** [0.000344]
Bargaining level				0,00587 [0.00760]	0,0241 [0.0267]	-0.209** [0.0345]	-0.131** [0.0342]
Bargaining level squared					-0,00359 [0.00512]	0.0343** [0.00579]	0.0192** [0.00637]
Constant	1.886** [0.0381]	1.789** [0.0363]	1.686** [0.0394]	1.803** [0.0361]	1.787** [0.0485]	1.876** [0.0492]	1.850** [0.0426]
Observations	306	329	270	329	329	264	352
R-squared	0,986	0,984	0,987	0,984	0,984	0,991	0,989

(1) Estimation method: Least Squares with year effects (pooled cross sections). See Appendix 1 and 2 for the definition of the variables. Robust standard errors in brackets. ** p<0.01, * p<0.05, + p<0.1.

Source: Commission services.

Table III.A3.4: **Wages and institutions: evidence from long-run wage equations, various sample splits, EU27, 1980-2007**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Dependent variable: log of nominal compensation per employee	Countries with relatively decentralised bargaining		Countries with relatively centralised bargaining		Countries with less bargaining coordination and intermediate centralisation		Countries with more bargaining coordination and intermediate centralisation		Countries with out indexation systems throughout the whole sample period		Countries with indexation systems throughout the whole sample period	
Explanatory variables												
Log CPI	1.093** [0.0737]	1.054** [0.0401]	0.989** [0.0853]	0.973** [0.0847]	0.969** [0.0725]	0.973** [0.0696]	1.060** [0.0353]	1.064** [0.0274]	1.011** [0.0294]	0.965** [0.0176]	1.021** [0.0171]	0.955** [0.0511]
Unemployment rate	-0.00907+ [0.00432]	-0.00638 [0.00435]	-0.00156 [0.00252]	-0.00183 [0.00249]	0.00868** [0.000811]	0.00851* [0.00199]	-0.00559** [0.000705]	-0.00691* [0.00152]	-0.00511+ [0.00253]	-0.00396* [0.00187]	0.000174 [0.00190]	0.000251 [0.00223]
Log labour productivity	0.780** [0.113]	0.706** [0.0812]	0.793** [0.111]	0.817** [0.115]	1.046** [0.139]	1.011** [0.135]	0.370+ [0.131]	0.408* [0.0936]	0.803** [0.0644]	0.827** [0.0489]	0.789** [0.0296]	0.868** [0.0692]
Log terms of trade		0.834** [0.142]		0.064 [0.187]		0.300* [0.105]		0.468 [0.341]		0.464** [0.125]		0.134 [0.0732]
Constant	-2.946** [0.233]	-6.537** [0.587]	-2.357** [0.306]	-2.622* [0.890]	-3.005** [0.114]	-4.304** [0.476]	-2.254** [0.0392]	-4.472+ [1.612]	-2.513** [0.0935]	-4.502** [0.553]	-2.622** [0.0617]	-3.073** [0.226]
Observations	186	186	143	143	56	56	52	52	448	448	101	101
R-squared	0.978	0.983	0.984	0.984	0.991	0.992	0.984	0.986	0.99	0.992	0.992	0.993
Number of countries	16	16	11	11	5	5	4	4	22	22	5	5

(1) "Estimation method: Least Square Dummy Variables. See Appendix 1 and 2 for the definition of the variables. Robust standard errors in brackets. Clustering of standard errors by country** p<0.01, * p<0.05, + p<0.1. Relatively decentralised bargaining: BG, CY, CZ, DE, EE, FR, UK, HU, LT, LU, LV, MT, PL, PT, RO, SK. Relatively decentralised bargaining: AT, BE, DK, ES, FI, EL, IE, IT, NL, SI, SE. Intermediate centralisation of bargaining and low coordination: BG, CY, CZ, FR, HU. Intermediate centralisation of bargaining and high coordination: AT, DE, IT, SK. Countries with indexation throughout the sample period: BE, CY, ES, LU, MT."

Source: Commission services.

Table III.A3.5: **Wages and institutions: evidence from Error Correction Models, various sample splits, EU27, 1980-2007**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Dependent variable: $\Delta \log$ of nominal compensation per employee	Countries with relatively decentralised bargaining	Countries with relatively centralised bargaining	Countries with less bargaining coordination and intermediate centralisation	Countries with more bargaining coordination and intermediate centralisation	Countries with out indexation systems throughout the whole sample period	Countries with indexation systems throughout the whole sample period						
Explanatory variables												
$\Delta \log$ CPI	1.069** [0.0709]	1.083** [0.0691]	0.734** [0.151]	0.724** [0.147]	0.885** [0.0568]	0.864** [0.0452]	0.303 [0.173]	0.435 [0.196]	0.967** [0.0459]	0.968** [0.0427]	0.849** [0.0611]	0.855** [0.0752]
Δ Unemployment rate	-0.00630+ [0.00338]	-0.00533 [0.00370]	0.00119 [0.00147]	0.000984 [0.00152]	0.00268** [0.000356]	0.00305* [0.000723]	0.00304 [0.00172]	0.00123 [0.00199]	-0.00425* [0.00185]	-0.00358+ [0.00187]	0.00432** [0.000737]	0.00441** [0.000835]
$\Delta \log$ labour productivity	0.394 [0.255]	0.431+ [0.214]	0.254* [0.0929]	0.265* [0.0978]	0.950* [0.305]	0.964* [0.279]	0.516 [0.253]	0.581+ [0.205]	0.463** [0.146]	0.500** [0.133]	0.162+ [0.0648]	0.177* [0.0494]
$\Delta \log$ terms of trade		0.152 [0.134]	0.0814 [0.0547]	0.0814 [0.0547]	0.264 [0.170]	0.264 [0.170]	0.273 [0.165]	0.273 [0.165]	0.147* [0.0673]	0.147* [0.0673]	-0.0355 [0.0233]	-0.0355 [0.0233]
Error correction term	-0.0767 [0.0761]	-0.164 [0.127]	-0.253* [0.0817]	-0.251* [0.0799]	-0.360** [0.0537]	-0.373** [0.0534]	-0.449 [0.230]	-0.454 [0.217]	-0.0941* [0.0452]	-0.151* [0.0545]	-0.265** [0.0185]	-0.302** [0.0424]
Constant	0.0143 [0.00995]	0.0117 [0.00866]	0.0177** [0.00532]	0.0178** [0.00523]	0.0051 [0.00943]	0.00493 [0.00796]	0.0203 [0.00882]	0.0158 [0.00834]	0.0116** [0.00402]	0.00997* [0.00363]	0.0139** [0.00189]	0.0136** [0.00244]
Observations	170	170	132	132	51	51	48	48	426	426	96	96
R-squared	0.703	0.712	0.442	0.447	0.701	0.71	0.369	0.4	0.777	0.788	0.778	0.796
Number of countries	16	16	11	11	5	5	4	4	22	22	5	5

Estimation method: Least Square Dummy Variables. See Appendix 1 and 2 for the definition of the variables. Robust standard errors in brackets. Clustering of standard errors by country** p<0.01, * p<0.05, + p<0.1

(1) Estimation method: Least Square Dummy Variables. See Appendix 1 and 2 for the definition of the variables. Robust standard errors in brackets. Clustering of standard errors by country** p<0.01, * p<0.05, + p<0.1.

Source: Commission services.

Table III.A3.6: **The role of social pacts: evidence from long-run wage equations, EU27, 1980-2007**

Explanatory variables	(1)		(2)	
	Dependent variables	Δ Log nominal compensation per employee	Dependent variables	Δ Log nominal compensation per employee
Log CPI		1.013** [0.0467]	Δ Log CPI	0.946** [0.0814]
Unemployment rate		-0.00410+ [0.00239]	Δ Unemployment rate	-0.0012 [0.00106]
Log labour productivity		0.827** [0.0781]	Δ Log labour productivity	0.522** [0.111]
			Error correction term	-0.108* [0.0443]
Dummy, 1 if pact or agreement setting cap to wage growth, 1 lag		-0,00544 [0.00700]	Dummy, 1 if pact or agreement setting cap to wage growth, 1 lag	-0,00133 [0.00265]
Dummy, 1 if pact or agreement setting cap to wage growth, 2 lags		-0,0129 [0.00798]	Dummy, 1 if pact or agreement setting cap to wage growth, 2 lags	-0,00608 [0.00372]
Dummy, 1 if pact or agreement setting cap to wage growth, 3 lags		-0.0109* [0.00525]	Dummy, 1 if pact or agreement setting cap to wage growth, 3 lags	0,00069 [0.00163]
Constant		-2.582** [0.137]	Constant	0.0105* [0.00443]
Observations		502	Observations	428
R-squared		0,987	R-squared	0,725
Number of countries		27	Number of countries	24

(1) Estimation method: Least Square Dummy Variables. See Appendix 1 and 2 for the definition of the variables. Robust standard errors in brackets. Clustering of standard errors by country** p<0.01, * p<0.05, + p<0.1.

Source: Commission services.

Table III.A3.7: Long-run wage equations, various sample, 1980-2007

	(1)	(2)	(3)	(4)
Dependent variable log nominal compensation per employee				
	OECD countries	EU countries	EU countries	Euro-area EU countries
Explanatory variables				
Log CPI	0.973** [0.0200]	1.008** [0.0265]	0.969** [0.0170]	1.117** [0.0635]
Unemployment rate	-0.00430* [0.00199]	-0.00448* [0.00213]	-0.00319+ [0.00175]	-0.00517* [0.00230]
Log labour productivity	0.820** [0.0496]	0.808** [0.0591]	0.837** [0.0448]	0.549** [0.103]
Log terms of trade			0.297* [0.120]	
Constant	-2.275** [0.107]	-2.524** [0.0846]	-3.775** [0.538]	-2.620** [0.239]
Observations	793	549	549	108
R-squared	0,992	0,991	0,991	0,969
Number of countries	37	27	27	12

(1) Estimations method: Least Square Dummy Variables. See Appendix 1 for the definition of the variables. Robust standard errors in brackets. ** p<0.01, * p<0.05, + p<0.1.

Source: Commission services.

Table III.A3.8: **Wage equations, Error Correction Model, various sample, 1980-2007**

	(1)	(2)	(3)	(4)
Dependent variable Δ log nominal compensation per employee				
	OECD countries	EU countries	EU countries	Euro-area EU countries
Explanatory variables				
Δ Log CPI	0.918** [0.0450]	0.955** [0.0452]	0.955** [0.0438]	0.379** [0.0925]
Δ Unemployment rate	-0.00341* [0.00131]	-0.00324+ [0.00166]	-0.00268 [0.00170]	-0.00113 [0.00163]
Δ Log labour productivity	0.387** [0.0686]	0.412** [0.121]	0.442** [0.116]	0.115 [0.107]
Δ Log terms of trade			0.108+ [0.0566]	
Error correction term	-0.114** [0.0362]	-0.107* [0.0418]	-0.138** [0.0466]	-0.313* [0.126]
Constant	0.0137** [0.00293]	0.0124** [0.00323]	0.0112** [0.00305]	0.0231** [0.00262]
Observations	756	522	522	96
R-squared	0,783	0,771	0,778	0,283
Number of countries	37	27	27	12

Estimations method: Least Square Dummy Variables. See Appendix 1 for the definition of the variables. Robust standard errors in brackets. C

(1) Estimations method: Least Square Dummy Variables. See Appendix 1 for the definition of the variables. Robust standard errors in brackets. Clustering of standard errors by country** p<0.01, * p<0.05, + p<0.1.

Source: Commission services.

Annex

APPENDIX 1

Statistical annex

European Union (27 countries)		2006	2007	2008	2009	2010	2009-2010
1	- Population (total, 1000 pers.)	486478	488525	490635	492266	493683	0.3 %
2	- Population (working age:15-64, 1000 pers.)	327892	329230	330413	330898	331157	0.1 %
	(% of total population)	67.4	67.4	67.3	67.2	67.1	-0.1 pps
3	- Labour force (15-64, 1000 pers.)	230437	232048	234302	235080	235271	0.1 %
	Male	126927	127592	128502	128412	128302	-0.1 %
	Female	103510	104456	105800	106668	106969	0.3 %
4	- Activity rate (% of population 15-64)	70.3	70.5	70.9	71.0	71.0	0.0 pps
	Young (15-24)	44.2	44.2	44.4	43.8	43.1	-0.8 pps
	Prime age (25-54)	84.3	84.4	84.8	84.9	84.9	0.1 pps
	Older (55-64)	46.4	47.2	48.1	49.1	49.7	0.6 pps
	Nationals (15-64)	70.2	70.5	70.8	71.0	71.0	0.0 pps
	Non-nationals (15-64)	71.0	71.0	71.8	71.8	71.8	-0.1 pps
	Male	77.6	77.7	78.0	77.8	77.7	-0.1 pps
	Young (15-24)	47.6	47.6	47.9	47.0	46.2	-0.8 pps
	Prime age (25-54)	92.0	91.9	92.0	91.8	91.7	-0.1 pps
	Older (55-64)	56.1	57.0	57.9	58.6	58.9	0.3 pps
	Female	63.0	63.3	63.9	64.3	64.5	0.1 pps
	Young (15-24)	40.7	40.7	40.9	40.6	39.8	-0.7 pps
	Prime age (25-54)	76.5	76.9	77.5	77.9	78.1	0.2 pps
	Older (55-64)	37.2	38.0	38.8	40.2	41.1	1.0 pps
5	- Employment rate (% of population 15-64)	64.5	65.4	65.9	64.6	64.2	-0.5 pps
	Young (15-24)	36.6	37.4	37.5	35.1	34.1	-1.0 pps
	Prime age (25-54)	78.2	79.1	79.6	78.2	77.6	-0.6 pps
	Older (55-64)	43.5	44.6	45.6	46.0	46.3	0.3 pps
	Low-skilled (15-64)	45.5	46.3	46.0	43.9	42.7	-1.2 pps
	Medium-skilled (15-64)	73.3	73.2	72.2	70.0	69.0	-1.0 pps
	High-skilled (15-64)	95.2	93.4	92.2	92.3	91.9	-0.4 pps
	Nationals (15-64)	60.7	61.3	61.5	60.3	59.7	-0.5 pps
	Non-nationals (15-64)	3.7	4.1	4.4	4.3	4.4	0.0 pps
	Male	71.6	72.5	72.8	70.7	70.1	-0.6 pps
	Young (15-24)	39.6	40.4	40.4	37.2	36.2	-0.9 pps
	Prime age (25-54)	86.0	86.8	86.9	84.6	83.9	-0.7 pps
	Older (55-64)	52.7	53.9	55.0	54.8	54.6	-0.2 pps
	Female	57.3	58.3	59.1	58.6	58.2	-0.3 pps
	Young (15-24)	33.5	34.2	34.6	33.0	31.8	-1.2 pps
	Prime age (25-54)	70.3	71.4	72.3	71.7	71.3	-0.4 pps
	Older (55-64)	34.9	35.9	36.8	37.8	38.6	0.8 pps
6	- Employed persons (15-64, 1000 pers.)	211392.6	215297.6	217754.1	213874.5	212439.7	-0.7 %
7	- Employment growth (% , National accounts)	1.7	1.8	0.9	-1.8	-0.5	1.3 pps
	Employment growth (% , 15-64, LFS)	:	:	:	:	:	pps
	Male	:	:	:	:	:	pps
	Female	:	:	:	:	:	pps
8	- Self employed (% of total employment)	14.5	14.4	14.2	14.3	14.5	0.2 pps
	Male	10.2	10.1	9.9	9.9	10.1	0.2 pps
	Female	4.3	4.3	4.3	4.4	4.5	0.1 pps
9	- Temporary employment (% of total employment)	14.5	14.6	14.1	13.6	13.9	0.3 pps
	Male	14.0	13.9	13.3	12.8	13.3	0.5 pps
	Female	15.1	15.3	15.0	14.5	14.6	0.1 pps
10	- Part-time (% of total employment)	17.5	17.6	17.6	18.1	18.5	0.4 pps
	Male	6.9	7.0	7.0	7.4	7.8	0.4 pps
	Female	30.7	30.7	30.6	31.0	31.4	0.4 pps
11	- Unemployment rate (harmonised:15-74)	8.3	7.2	7.1	9.0	9.7	0.7 pps
	Young (15-24)	17.3	15.5	15.5	19.8	20.8	1.0 pps
	Prime age (25-49)	7.3	6.4	6.3	8.2	8.9	0.7 pps
	Older (55-64)	6.2	5.5	5.1	6.3	6.9	0.6 pps
	Low-skilled (15-64)	11.7	10.9	11.6	14.9	16.2	1.3 pps
	Medium-skilled (15-64)	8.3	7.0	6.5	8.4	9.1	0.7 pps
	High-skilled (15-64)	4.6	4.0	3.8	5.0	5.4	0.4 pps
	Nationals (15-64)	7.9	6.9	6.7	8.4	9.1	0.7 pps
	Non-nationals (15-64)	13.1	12.0	12.2	16.4	16.8	0.4 pps
	Male	7.6	6.6	6.7	9.1	9.7	0.6 pps
	Female	9.0	7.9	7.6	9.0	9.6	0.6 pps
12	- Long-term unemployment rate (% of total unemployment)	45.9	42.7	37.0	33.1	39.9	6.8 pps
13	- Worked hours (average actual weekly hours)	41.2	41.2	41.0	40.6	40.8	0.5 %
	Male	42.3	42.3	42.1	41.7	41.9	0.5 %
	Female	39.2	39.2	39.1	38.9	39.1	0.5 %
14	- Sectoral employment growth (% change)						
	Agriculture	-4.0	-1.8	-1.6	-3.6	-2.5	1.1 pps
	Building and construction	3.6	5.3	0.3	-5.1	-3.4	1.7 pps
	Services	2.4	2.1	1.5	-0.4	0.5	1.0 pps
	Manufacturing industry	0.2	0.6	-0.1	-5.5	-3.1	2.4 pps
15	- Indicator board on wage developments (% change)						
	Compensation per employee	2.7	3.3	0.6	-1.3	3.2	4.4 pps
	Real compensation per employee based on GDP	0.6	0.5	0.7	0.4	0.8	0.4 pps
	Hourly labour costs (Eurostat labour cost index)	3.2	3.6	4.1	2.5	1.6	-0.9 pps
	Wage and salaries	:	:	:	:	:	pps
	Labour productivity (GDP/person employed)	1.6	1.1	-0.5	-2.5	2.3	4.8 pps

Euro Area		2006	2007	2008	2009	2010	2009-2010
1	- Population (total, 1000 pers.)	319851	321690	323377	324454	325360	0.3 %
2	- Population (working age:15-64, 1000 pers.)	214210	215228	216116	216349	216421	0.0 %
	(% of total population)	67.0	66.9	66.8	66.7	66.5	-0.2 pps
3	- Labour force (15-64, 1000 pers.)	151266	152741	154382	154748	154535	-0.1 %
	Male	84074	84607	85141	84895	84606	-0.3 %
	Female	67192	68134	69241	69853	69929	0.1 %
4	- Activity rate (% of population 15-64)	70.6	71.0	71.4	71.5	71.4	-0.1 pps
	Young (15-24)	44.3	44.4	44.6	43.8	42.6	-1.2 pps
	Prime age (25-54)	84.6	84.8	85.3	85.3	85.2	-0.1 pps
	Older (55-64)	44.9	46.2	47.1	48.4	49.4	1.0 pps
	Nationals (15-64)	70.6	71.0	71.4	71.5	71.4	-0.1 pps
	Non-nationals (15-64)	70.7	70.8	71.5	71.5	71.4	-0.1 pps
	Male	78.5	78.6	78.8	78.5	78.2	-0.2 pps
	Young (15-24)	47.9	47.8	47.9	46.8	45.6	-1.3 pps
	Prime age (25-54)	93.1	93.0	93.0	92.6	92.4	-0.2 pps
	Older (55-64)	54.6	55.7	56.5	57.4	58.2	0.8 pps
	Female	62.8	63.3	64.1	64.6	64.6	0.0 pps
	Young (15-24)	40.6	41.0	41.2	40.7	39.5	-1.2 pps
	Prime age (25-54)	76.1	76.6	77.4	77.9	77.9	0.1 pps
	Older (55-64)	35.7	37.1	38.1	39.9	41.0	1.1 pps
5	- Employment rate (% of population 15-64)	64.7	65.6	66.0	64.7	64.2	-0.5 pps
	Young (15-24)	36.9	37.7	37.7	35.2	33.9	-1.3 pps
	Prime age (25-54)	78.3	79.2	79.5	78.0	77.3	-0.6 pps
	Older (55-64)	41.7	43.2	44.3	45.1	45.8	0.6 pps
	Low-skilled (15-64)	47.7	48.6	47.8	45.4	44.4	-1.0 pps
	Medium-skilled (15-64)	73.3	75.0	73.5	71.5	70.3	-1.1 pps
	High-skilled (15-64)	93.0	91.4	90.1	90.4	89.1	-1.3 pps
	Nationals (15-64)	59.9	60.5	60.6	59.4	58.8	-0.6 pps
	Non-nationals (15-64)	4.7	5.0	5.4	5.3	5.3	0.1 pps
	Male	72.6	73.3	73.3	71.1	70.4	-0.7 pps
	Young (15-24)	40.4	41.0	40.6	37.3	36.0	-1.3 pps
	Prime age (25-54)	87.1	87.7	87.5	84.9	84.1	-0.8 pps
	Older (55-64)	50.9	52.4	53.3	53.5	53.8	0.3 pps
	Female	56.8	57.9	58.7	58.3	57.9	-0.4 pps
	Young (15-24)	33.4	34.4	34.7	33.0	31.7	-1.4 pps
	Prime age (25-54)	69.5	70.6	71.6	70.9	70.5	-0.5 pps
	Older (55-64)	32.9	34.5	35.7	37.1	38.1	1.0 pps
6	- Employed persons (15-64, 1000 pers.)	138526.0	141228.6	142695.6	139993.1	138883.6	-0.8 %
7	- Employment growth (% , National accounts)	1.7	1.8	0.8	-1.9	-0.5	1.4 pps
	Employment growth (% , 15-64, LFS)	:	:	:	:	:	pps
	Male	:	:	:	:	:	pps
	Female	:	:	:	:	:	pps
8	- Self employed (% of total employment)	14.7	14.5	14.3	14.3	14.5	0.2 pps
	Male	10.3	10.2	9.9	9.9	10.1	0.1 pps
	Female	4.4	4.4	4.4	4.4	4.4	0.1 pps
9	- Temporary employment (% of total employment)	16.7	16.6	16.3	15.4	15.6	0.2 pps
	Male	15.8	15.8	15.2	14.3	14.8	0.5 pps
	Female	17.7	17.6	17.4	16.6	16.6	0.0 pps
10	- Part-time (% of total employment)	18.7	18.8	18.9	19.5	19.9	0.4 pps
	Male	6.7	6.8	6.8	7.3	7.6	0.3 pps
	Female	34.0	34.2	34.1	34.4	34.8	0.4 pps
11	- Unemployment rate (harmonised:15-74)	8.5	7.6	7.6	9.6	10.1	0.5 pps
	Young (15-24)	16.6	15.1	15.5	19.7	20.5	0.8 pps
	Prime age (25-49)	7.6	6.8	6.9	8.9	9.6	0.7 pps
	Older (55-64)	7.2	6.3	5.9	6.9	7.4	0.5 pps
	Low-skilled (15-64)	11.6	10.8	11.7	15.1	16.5	1.4 pps
	Medium-skilled (15-64)	8.2	7.1	6.9	8.5	8.9	0.4 pps
	High-skilled (15-64)	5.1	4.5	4.3	5.4	5.9	0.5 pps
	Nationals (15-64)	7.9	7.1	7.0	8.7	9.3	0.6 pps
	Non-nationals (15-64)	14.0	12.9	13.2	17.8	18.1	0.3 pps
	Male	7.6	6.7	7.0	9.4	10.0	0.6 pps
	Female	9.7	8.7	8.5	9.8	10.4	0.6 pps
12	- Long-term unemployment rate (% of total unemployment)	46.2	44.3	39.3	35.6	42.5	6.9 pps
13	- Worked hours (average actual weekly hours)	41.1	41.1	40.9	40.5	40.8	0.7 %
	Male	42.2	42.2	42.0	41.5	41.8	0.7 %
	Female	39.0	39.1	39.0	38.7	38.9	0.5 %
14	- Sectoral employment growth (% change)						
	Agriculture	-1.8	-1.8	-1.7	-2.4	-0.6	1.8 pps
	Building and construction	2.8	3.8	-2.0	-6.7	-3.7	3.0 pps
	Services	2.3	2.1	1.4	-0.5	0.5	1.0 pps
	Manufacturing industry	-0.4	0.4	0.0	-5.4	-3.3	2.1 pps
15	- Indicator board on wage developments (% change)						
	Compensation per employee	2.3	2.6	3.3	1.5	1.6	0.1 pps
	Real compensation per employee based on GDP	0.6	0.2	1.3	0.8	0.7	0.0 pps
	Hourly labour costs (Eurostat labour cost index)	2.5	2.8	3.6	2.8	1.5	-1.3 pps
	Wage and salaries	:	:	:	:	:	pps
	Labour productivity (GDP/person employed)	1.4	1.0	-0.4	-2.3	2.2	4.5 pps

Belgium		2006	2007	2008	2009	2010	2009-2010
1	- Population (total, 1000 pers.)	10546	10614	10708	10796	10892	0.9 %
2	- Population (working age:15-64, 1000 pers.)	6941	7008	7073	7126	7177	0.7 %
	(% of total population)	65.8	66.0	66.1	66.0	65.9	-0.1 pps
3	- Labour force (15-64, 1000 pers.)	4616	4701	4747	4769	4856	1.8 %
	<i>Male</i>	2562	2595	2609	2609	2649	1.5 %
	<i>Female</i>	2054	2106	2138	2159	2207	2.2 %
4	- Activity rate (% of population 15-64)	66.5	67.1	67.1	66.9	67.7	0.7 pps
	Young (15-24)	34.7	33.9	33.4	32.4	32.5	0.1 pps
	Prime age (25-54)	84.5	85.3	85.7	85.6	86.3	0.8 pps
	Older (55-64)	33.6	35.9	36.1	37.2	39.2	2.0 pps
	Nationals (15-64)	67.0	67.5	67.4	67.3	67.9	0.6 pps
	Non-nationals (15-64)	61.2	63.3	64.3	63.1	65.1	2.0 pps
	<i>Male</i>	73.4	73.6	73.3	72.8	73.4	0.6 pps
	Young (15-24)	37.4	36.1	36.0	34.9	35.2	0.3 pps
	Prime age (25-54)	91.9	92.5	92.3	91.8	92.2	0.4 pps
	Older (55-64)	42.7	44.4	44.5	45.2	47.6	2.4 pps
	<i>Female</i>	59.5	60.4	60.8	60.9	61.8	0.9 pps
	Young (15-24)	31.9	31.6	30.8	29.9	29.8	-0.2 pps
	Prime age (25-54)	77.0	78.0	79.0	79.2	80.4	1.2 pps
	Older (55-64)	24.6	27.5	27.9	29.3	30.9	1.6 pps
5	- Employment rate (% of population 15-64)	61.0	62.0	62.4	61.6	62.0	0.4 pps
	Young (15-24)	27.6	27.5	27.4	25.3	25.2	-0.1 pps
	Prime age (25-54)	78.4	79.7	80.5	79.8	80.0	0.2 pps
	Older (55-64)	32.0	34.4	34.5	35.2	37.3	2.1 pps
	Low-skilled (15-64)	36.0	37.4	37.8	36.0	37.5	1.5 pps
	Medium-skilled (15-64)	69.8	71.6	71.8	70.3	66.5	-3.8 pps
	High-skilled (15-64)	95.3	92.0	89.3	88.8	91.6	2.8 pps
	Nationals (15-64)	56.4	57.2	57.4	56.6	56.7	0.2 pps
	Non-nationals (15-64)	4.6	4.9	5.0	5.0	5.3	0.3 pps
	<i>Male</i>	67.9	68.7	68.6	67.2	67.4	0.3 pps
	Young (15-24)	30.4	29.9	29.7	27.4	27.3	-0.1 pps
	Prime age (25-54)	85.9	87.0	87.0	85.7	85.5	-0.1 pps
	Older (55-64)	40.9	42.9	42.8	42.9	45.6	2.7 pps
	<i>Female</i>	54.0	55.3	56.2	56.0	56.5	0.5 pps
	Young (15-24)	24.7	25.0	25.0	23.2	23.1	-0.1 pps
	Prime age (25-54)	70.7	72.3	73.8	73.8	74.4	0.6 pps
	Older (55-64)	23.2	26.0	26.3	27.7	29.2	1.5 pps
6	- Employed persons (15-64, 1000 pers.)	4232.9	4348.1	4413.7	4389.4	4450.6	1.4 %
7	- Employment growth (% , National accounts)	1.2	1.6	1.7	-0.4	0.7	1.1 pps
	Employment growth (% , 15-64, LFS)	:	:	:	:	:	: pps
	<i>Male</i>	:	:	:	:	:	: pps
	<i>Female</i>	:	:	:	:	:	: pps
8	- Self employed (% of total employment)	13.2	13.1	12.7	13.2	13.0	-0.2 pps
	<i>Male</i>	9.4	9.2	8.9	9.2	9.0	-0.1 pps
	<i>Female</i>	3.8	3.9	3.8	4.0	4.0	0.0 pps
9	- Temporary employment (% of total employment)	8.7	8.6	8.3	8.2	8.1	-0.1 pps
	<i>Male</i>	6.9	6.8	6.6	6.5	6.7	0.2 pps
	<i>Female</i>	10.8	10.8	10.2	10.2	9.6	-0.6 pps
10	- Part-time (% of total employment)	22.0	21.9	22.4	23.2	23.7	0.5 pps
	<i>Male</i>	7.0	7.1	7.5	8.2	8.4	0.2 pps
	<i>Female</i>	41.0	40.5	40.8	41.4	42.1	0.7 pps
11	- Unemployment rate (harmonised:15-74)	8.3	7.5	7.0	7.9	8.3	0.4 pps
	Young (15-24)	20.5	18.8	18.0	21.9	22.4	0.5 pps
	Prime age (25-49)	7.4	6.8	6.3	7.1	7.6	0.5 pps
	Older (55-64)	4.8	4.2	4.4	5.1	4.6	-0.5 pps
	Low-skilled (15-64)	14.0	13.0	12.5	13.7	15.4	1.7 pps
	Medium-skilled (15-64)	8.2	7.6	7.0	8.1	8.2	0.1 pps
	High-skilled (15-64)	4.5	3.8	3.6	4.5	4.5	0.0 pps
	Nationals (15-64)	7.5	6.8	6.3	7.1	7.5	0.4 pps
	Non-nationals (15-64)	17.4	15.5	14.2	16.2	16.4	0.2 pps
	<i>Male</i>	7.4	6.7	6.5	7.8	8.1	0.3 pps
	<i>Female</i>	9.3	8.5	7.6	8.1	8.5	0.4 pps
12	- Long-term unemployment rate (% of total unemployment)	51.2	50.4	47.5	44.2	48.8	4.6 pps
13	- Worked hours (average actual weekly hours)	40.9	41.1	40.8	40.8	41.2	1.0 %
	<i>Male</i>	41.8	41.9	41.7	41.7	42.1	1.0 %
	<i>Female</i>	38.9	39.4	39.0	39.2	39.5	0.8 %
14	- Sectoral employment growth (% change)						
	Agriculture	-1.2	-2.4	-1.2	-1.3	-1.3	0.0 pps
	Building and construction	3.8	3.6	2.7	-0.8	0.4	1.2 pps
	Services	1.5	2.1	2.0	0.3	1.5	1.1 pps
	Manufacturing industry	-1.2	-1.1	-0.2	:	:	: pps
15	- Indicator board on wage developments (% change)						
	Compensation per employee	3.3	3.4	3.6	1.8	1.1	-0.8 pps
	Real compensation per employee based on GDP	1.0	1.1	1.7	0.7	-0.8	-1.5 pps
	Hourly labour costs (Eurostat labour cost index)	2.5	3.8	3.5	4.2	:	: pps
	Wage and salaries	4.8	4.9	:	:	:	: pps
	Labour productivity (GDP/person employed)	1.5	1.3	-0.7	-2.4	1.5	3.9 pps

Bulgaria		2006	2007	2008	2009	2010	2009-2010
1	- Population (total, 1000 pers.)	7706	7673	7640	7607	7564	-0.6 %
2	- Population (working age:15-64, 1000 pers.)	5238	5198	5169	5122	5046	-1.5 %
	(% of total population)	68.0	67.7	67.7	67.3	66.7	-0.6 pps
3	- Labour force (15-64, 1000 pers.)	3376	3448	3505	3442	3356	-2.5 %
	<i>Male</i>	1782	1820	1859	1828	1775	-2.9 %
	<i>Female</i>	1595	1628	1646	1614	1582	-2.0 %
4	- Activity rate (% of population 15-64)	64.5	66.3	67.8	67.2	66.5	-0.7 pps
	Young (15-24)	28.9	28.9	30.1	29.5	28.9	-0.6 pps
	Prime age (25-54)	82.3	84.5	85.5	84.3	83.4	-0.9 pps
	Older (55-64)	43.0	45.7	48.7	49.2	47.9	-1.2 pps
	Nationals (15-64)	64.5	66.3	67.8	67.2	66.5	-0.7 pps
	Non-nationals (15-64)	61.8	0.0	0.0	0.0	0.0	0.0 pps
	<i>Male</i>	68.8	70.6	72.5	72.0	70.8	-1.2 pps
	Young (15-24)	31.3	31.7	34.0	34.0	33.4	-0.6 pps
	Prime age (25-54)	85.1	87.5	88.8	88.0	86.3	-1.7 pps
	Older (55-64)	53.6	55.3	58.7	57.4	55.7	-1.7 pps
	<i>Female</i>	60.2	62.1	63.1	62.5	62.3	-0.2 pps
	Young (15-24)	26.4	26.0	26.1	24.8	24.2	-0.6 pps
	Prime age (25-54)	79.4	81.4	82.1	80.6	80.5	-0.1 pps
	Older (55-64)	33.9	37.2	40.2	42.1	41.3	-0.8 pps
5	- Employment rate (% of population 15-64)	58.6	61.7	64.0	62.6	59.7	-2.9 pps
	Young (15-24)	23.2	24.5	26.3	24.8	22.2	-2.5 pps
	Prime age (25-54)	75.7	79.4	81.3	79.2	75.7	-3.5 pps
	Older (55-64)	39.6	42.6	46.0	46.1	43.5	-2.6 pps
	Low-skilled (15-64)	25.3	25.1	27.4	28.5	25.0	-3.5 pps
	Medium-skilled (15-64)	71.5	76.2	76.9	71.0	66.4	-4.6 pps
	High-skilled (15-64)	84.1	86.7	89.3	88.5	84.6	-3.8 pps
	Nationals (15-64)	58.5	61.6	63.9	62.5	59.6	-2.9 pps
	Non-nationals (15-64)	0.1	0.0	0.0	0.0	0.0	0.0 pps
	<i>Male</i>	62.8	66.0	68.5	66.9	63.0	-3.9 pps
	Young (15-24)	25.4	27.1	29.3	28.0	25.4	-2.6 pps
	Prime age (25-54)	78.6	82.5	84.7	82.7	77.9	-4.8 pps
	Older (55-64)	49.5	51.8	55.8	54.1	50.3	-3.8 pps
	<i>Female</i>	54.6	57.6	59.5	58.3	56.4	-2.0 pps
	Young (15-24)	21.0	21.8	23.1	21.4	18.9	-2.5 pps
	Prime age (25-54)	72.8	76.2	77.9	75.8	73.6	-2.2 pps
	Older (55-64)	31.1	34.5	37.7	39.2	37.7	-1.6 pps
6	- Employed persons (15-64, 1000 pers.)	3071.7	3208.8	3306.2	3204.8	3010.4	-6.1 %
7	- Employment growth (% , National accounts)	3.3	3.2	2.6	-2.6	-5.9	-3.3 pps
	Employment growth (% , 15-64, LFS)	:	:	:	:	:	pps
	<i>Male</i>	:	:	:	:	:	pps
	<i>Female</i>	:	:	:	:	:	pps
8	- Self employed (% of total employment)	11.5	10.9	10.9	11.2	11.5	0.4 pps
	<i>Male</i>	7.7	7.3	7.2	7.4	7.4	0.0 pps
	<i>Female</i>	3.8	3.6	3.8	3.8	4.1	0.4 pps
9	- Temporary employment (% of total employment)	6.1	5.1	4.9	4.6	4.4	-0.2 pps
	<i>Male</i>	6.2	4.8	5.5	5.1	5.0	-0.1 pps
	<i>Female</i>	6.1	5.4	4.3	4.1	3.9	-0.2 pps
10	- Part-time (% of total employment)	1.8	1.5	2.0	2.1	2.2	0.1 pps
	<i>Male</i>	1.3	1.1	1.6	1.8	2.0	0.2 pps
	<i>Female</i>	2.3	1.9	2.4	2.5	2.4	-0.1 pps
11	- Unemployment rate (harmonised:15-74)	9.0	6.9	5.6	6.8	10.2	3.4 pps
	Young (15-24)	19.5	15.1	12.7	16.2	23.2	7.0 pps
	Prime age (25-49)	8.0	6.1	4.8	6.0	9.2	3.2 pps
	Older (55-64)	7.9	6.8	5.5	6.3	9.3	3.0 pps
	Low-skilled (15-64)	20.5	18.0	14.9	15.8	23.1	7.3 pps
	Medium-skilled (15-64)	7.7	5.8	4.5	6.2	9.7	3.5 pps
	High-skilled (15-64)	4.0	2.4	2.3	2.9	4.5	1.6 pps
	Nationals (15-64)	9.0	6.9	5.7	6.9	10.3	3.4 pps
	Non-nationals (15-64)	:	:	:	:	:	pps
	<i>Male</i>	8.7	6.5	5.5	7.0	10.9	3.9 pps
	<i>Female</i>	9.3	7.3	5.8	6.6	9.5	2.9 pps
12	- Long-term unemployment rate (% of total unemployment)	55.7	58.9	51.6	43.1	46.4	3.3 pps
13	- Worked hours (average actual weekly hours)	41.4	41.4	41.4	40.7	40.9	0.5 %
	<i>Male</i>	41.9	41.9	41.8	41.0	41.1	0.2 %
	<i>Female</i>	40.9	40.9	40.9	40.3	40.6	0.7 %
14	- Sectoral employment growth (% change)						
	Agriculture	-1.3	-1.2	1.9	-0.6	-3.6	-3.0 pps
	Building and construction	25.1	17.7	18.6	-8.9	-18.6	-9.7 pps
	Services	3.4	3.3	2.2	-0.6	-4.7	-4.1 pps
	Manufacturing industry	3.3	3.4	-0.1	-7.2	-7.2	0.0 pps
15	- Indicator board on wage developments (% change)						
	Compensation per employee	6.3	12.7	16.3	9.4	7.2	-2.2 pps
	Real compensation per employee based on GDP	-0.5	3.2	7.3	4.9	4.1	-0.8 pps
	Hourly labour costs (Eurostat labour cost index)	5.8	17.2	20.2	13.1	9.2	-3.9 pps
	Wage and salaries	11.7	:	:	:	:	pps
	Labour productivity (GDP/person employed)	3.1	3.2	3.5	-2.9	6.4	9.3 pps

Czech Republic		2006	2007	2008	2009	2010	2009-2010
1	- Population (total, 1000 pers.)	10265	10320	10422	10499	10522	0.2 %
2	- Population (working age:15-64, 1000 pers.)	7307	7347	7410	7431	7400	-0.4 %
	(% of total population)	71.2	71.2	71.1	70.8	70.3	-0.5 pps
3	- Labour force (15-64, 1000 pers.)	5140	5132	5163	5209	5192	-0.3 %
	<i>Male</i>	2873	2888	2922	2952	2943	-0.3 %
	<i>Female</i>	2267	2244	2241	2257	2249	-0.4 %
4	- Activity rate (% of population 15-64)	70.3	69.9	69.7	70.1	70.2	0.1 pps
	Young (15-24)	33.5	31.9	31.1	31.8	30.9	-1.0 pps
	Prime age (25-54)	88.2	87.8	87.3	87.7	87.8	0.2 pps
	Older (55-64)	47.7	48.2	49.5	49.6	49.7	0.1 pps
	Nationals (15-64)	70.3	69.7	69.6	70.0	70.1	0.1 pps
	Non-nationals (15-64)	77.7	81.5	77.0	77.4	78.1	0.7 pps
	<i>Male</i>	78.3	78.1	78.1	78.5	78.6	0.1 pps
	Young (15-24)	37.7	36.7	35.9	37.3	36.2	-1.1 pps
	Prime age (25-54)	94.8	95.0	94.8	95.1	95.5	0.4 pps
	Older (55-64)	62.7	62.5	64.2	63.1	62.4	-0.7 pps
	<i>Female</i>	62.3	61.5	61.0	61.5	61.5	0.0 pps
	Young (15-24)	29.2	26.9	26.1	26.1	25.3	-0.8 pps
	Prime age (25-54)	81.3	80.3	79.6	79.9	79.8	-0.1 pps
	Older (55-64)	34.0	35.2	36.1	37.2	38.0	0.8 pps
5	- Employment rate (% of population 15-64)	65.3	66.1	66.6	65.4	65.0	-0.4 pps
	Young (15-24)	27.7	28.5	28.1	26.5	25.2	-1.3 pps
	Prime age (25-54)	82.5	83.5	83.8	82.5	82.2	-0.3 pps
	Older (55-64)	45.2	46.0	47.6	46.8	46.5	-0.3 pps
	Low-skilled (15-64)	21.1	22.2	23.2	21.4	19.7	-1.7 pps
	Medium-skilled (15-64)	73.8	74.4	74.0	71.7	69.8	-1.9 pps
	High-skilled (15-64)	98.9	96.1	95.8	97.9	102.2	4.3 pps
	Nationals (15-64)	64.6	65.4	65.8	64.4	64.0	-0.4 pps
	Non-nationals (15-64)	0.6	0.7	0.8	1.0	1.0	0.0 pps
	<i>Male</i>	73.7	74.8	75.4	73.8	73.5	-0.3 pps
	Young (15-24)	31.5	32.8	32.4	31.1	29.6	-1.5 pps
	Prime age (25-54)	90.4	91.7	92.1	90.5	90.5	0.0 pps
	Older (55-64)	59.5	59.6	61.9	59.6	58.4	-1.2 pps
	<i>Female</i>	56.8	57.3	57.6	56.7	56.3	-0.4 pps
	Young (15-24)	23.7	23.9	23.5	21.7	20.6	-1.1 pps
	Prime age (25-54)	74.5	74.9	75.2	74.1	73.4	-0.7 pps
	Older (55-64)	32.1	33.5	34.4	35.0	35.5	0.5 pps
6	- Employed persons (15-64, 1000 pers.)	4769.4	4855.9	4933.5	4857.2	4809.6	-1.0 %
7	- Employment growth (% , National accounts)	1.9	2.7	1.2	-1.2	-0.8	0.4 pps
	Employment growth (% , 15-64, LFS)	:	:	:	:	:	: pps
	<i>Male</i>	:	:	:	:	:	: pps
	<i>Female</i>	:	:	:	:	:	: pps
8	- Self employed (% of total employment)	15.3	15.4	15.2	15.9	16.8	0.9 pps
	<i>Male</i>	11.2	11.3	11.2	11.5	12.1	0.6 pps
	<i>Female</i>	4.1	4.0	4.0	4.3	4.7	0.3 pps
9	- Temporary employment (% of total employment)	8.0	7.8	7.2	7.5	8.2	0.7 pps
	<i>Male</i>	6.8	6.5	5.7	6.1	6.8	0.7 pps
	<i>Female</i>	9.4	9.4	9.1	9.3	9.8	0.5 pps
10	- Part-time (% of total employment)	4.4	4.4	4.3	4.8	5.1	0.3 pps
	<i>Male</i>	1.7	1.7	1.6	2.0	2.2	0.2 pps
	<i>Female</i>	8.0	7.9	7.8	8.5	9.1	0.6 pps
11	- Unemployment rate (harmonised:15-74)	7.2	5.3	4.4	6.7	7.3	0.6 pps
	Young (15-24)	17.5	10.7	9.9	16.6	18.3	1.7 pps
	Prime age (25-49)	6.3	4.8	4.0	6.0	6.4	0.4 pps
	Older (55-64)	5.3	4.6	3.9	5.7	6.5	0.8 pps
	Low-skilled (15-64)	24.8	20.4	19.4	24.4	25.3	0.9 pps
	Medium-skilled (15-64)	6.4	4.7	3.7	6.2	7.0	0.8 pps
	High-skilled (15-64)	2.5	1.7	1.7	2.5	2.8	0.3 pps
	Nationals (15-64)	7.2	5.4	4.4	6.8	7.4	0.6 pps
	Non-nationals (15-64)	6.2	5.6	3.7	5.8	4.6	-1.2 pps
	<i>Male</i>	5.8	4.2	3.5	5.9	6.4	0.5 pps
	<i>Female</i>	8.9	6.7	5.6	7.7	8.5	0.8 pps
12	- Long-term unemployment rate (% of total unemployment)	54.2	52.3	49.3	30.1	41.0	10.9 pps
13	- Worked hours (average actual weekly hours)	42.4	42.3	42.3	41.6	41.6	0.0 %
	<i>Male</i>	43.8	43.6	43.6	42.9	42.8	-0.2 %
	<i>Female</i>	40.4	40.4	40.3	39.8	39.9	0.3 %
14	- Sectoral employment growth (% change)						
	Agriculture	-0.7	-1.1	0.8	-2.2	-2.8	-0.6 pps
	Building and construction	2.0	4.3	2.7	1.4	0.3	-1.1 pps
	Services	2.0	3.3	1.0	0.7	0.0	-0.8 pps
	Manufacturing industry	2.3	1.8	1.0	-5.9	-2.4	3.5 pps
15	- Indicator board on wage developments (% change)						
	Compensation per employee	5.9	6.3	6.3	0.4	3.8	3.4 pps
	Real compensation per employee based on GDP	4.8	2.9	4.4	-2.1	5.0	7.1 pps
	Hourly labour costs (Eurostat labour cost index)	6.3	8.4	6.6	5.9	1.6	-4.3 pps
	Wage and salaries	7.9	9.4	8.7	0.0	:	: pps
	Labour productivity (GDP/person employed)	4.8	3.4	1.2	-3.0	3.2	6.2 pps

Denmark		2006	2007	2008	2009	2010	2009-2010
1	- Population (total, 1000 pers.)	5415	5431	5483	5517	5551	0.6 %
2	- Population (working age:15-64, 1000 pers.)	3569	3573	3592	3592	3622	0.8 %
	(% of total population)	65.9	65.8	65.5	65.1	65.2	0.1 pps
3	- Labour force (15-64, 1000 pers.)	2875	2866	2897	2897	2878	-0.7 %
	Male	1516	1513	1528	1521	1512	-0.6 %
	Female	1360	1353	1369	1376	1366	-0.7 %
4	- Activity rate (% of population 15-64)	80.6	80.2	80.7	80.7	79.5	-1.2 pps
	Young (15-24)	69.9	70.9	72.4	71.7	67.4	-4.3 pps
	Prime age (25-54)	88.9	89.0	89.9	89.7	89.0	-0.7 pps
	Older (55-64)	63.1	60.8	59.0	60.3	61.1	0.8 pps
	Nationals (15-64)	81.0	81.2	81.4	81.0	79.9	-1.1 pps
	Non-nationals (15-64)	70.6	63.9	68.9	75.0	72.8	-2.2 pps
	Male	84.1	83.9	84.5	84.0	82.7	-1.2 pps
	Young (15-24)	70.6	72.3	73.4	72.6	67.5	-5.1 pps
	Prime age (25-54)	92.3	92.5	93.4	92.4	92.4	0.0 pps
	Older (55-64)	69.5	66.9	66.2	67.7	67.3	-0.4 pps
	Female	77.0	76.4	76.8	77.3	76.1	-1.2 pps
	Young (15-24)	69.3	69.4	71.4	70.7	67.2	-3.5 pps
	Prime age (25-54)	85.4	85.4	86.4	87.0	85.6	-1.4 pps
	Older (55-64)	56.7	54.6	51.8	52.9	55.0	2.0 pps
5	- Employment rate (% of population 15-64)	77.4	77.1	77.9	75.7	73.4	-2.3 pps
	Young (15-24)	64.6	65.3	66.9	63.6	58.1	-5.5 pps
	Prime age (25-54)	86.1	86.3	87.6	85.1	83.2	-1.8 pps
	Older (55-64)	60.7	58.6	57.3	57.5	57.6	0.1 pps
	Low-skilled (15-64)	59.3	76.1	77.3	74.4	59.9	-14.5 pps
	Medium-skilled (15-64)	78.5	71.0	71.6	69.1	75.6	6.5 pps
	High-skilled (15-64)	94.5	84.4	81.9	83.1	90.0	7.0 pps
	Nationals (15-64)	74.8	73.9	74.1	72.0	69.6	-2.5 pps
	Non-nationals (15-64)	2.5	3.2	3.7	3.7	3.9	0.2 pps
	Male	81.2	81.0	81.9	78.3	75.8	-2.6 pps
	Young (15-24)	65.0	66.3	68.4	63.6	56.9	-6.7 pps
	Prime age (25-54)	90.1	90.2	91.2	87.2	85.9	-1.3 pps
	Older (55-64)	67.1	64.9	64.6	64.1	62.7	-1.4 pps
	Female	73.4	73.2	73.9	73.1	71.1	-2.0 pps
	Young (15-24)	64.1	64.2	65.4	63.7	59.4	-4.3 pps
	Prime age (25-54)	82.0	82.4	84.0	82.9	80.6	-2.3 pps
	Older (55-64)	54.3	52.4	50.1	50.9	52.5	1.5 pps
6	- Employed persons (15-64, 1000 pers.)	2761.7	2756.5	2798.9	2720.6	2659.6	-2.2 %
7	- Employment growth (% , National accounts)	2.1	2.8	1.9	-3.1	-2.1	1.0 pps
	Employment growth (% , 15-64, LFS)	:	:	:	:	:	: pps
	Male	:	:	:	:	:	: pps
	Female	:	:	:	:	:	: pps
8	- Self employed (% of total employment)	8.0	8.1	8.0	8.4	8.1	-0.3 pps
	Male	5.9	6.0	6.0	6.2	5.9	-0.3 pps
	Female	2.1	2.1	2.0	2.2	2.2	0.0 pps
9	- Temporary employment (% of total employment)	8.9	8.6	8.3	8.9	8.6	-0.3 pps
	Male	7.9	7.4	7.5	8.3	8.3	0.0 pps
	Female	9.9	9.9	9.1	9.6	8.8	-0.8 pps
10	- Part-time (% of total employment)	23.0	23.5	23.9	25.2	25.8	0.6 pps
	Male	12.3	12.5	13.3	14.0	14.1	0.1 pps
	Female	35.0	35.8	35.8	37.4	38.6	1.2 pps
11	- Unemployment rate (harmonised:15-74)	3.9	3.8	3.3	6.0	7.4	1.4 pps
	Young (15-24)	7.7	7.9	7.6	11.2	13.8	2.6 pps
	Prime age (25-54)	3.2	3.1	2.6	5.3	6.6	1.3 pps
	Older (55-64)	3.9	3.5	2.8	4.7	5.8	1.1 pps
	Low-skilled (15-64)	6.7	5.7	5.0	9.0	11.0	2.0 pps
	Medium-skilled (15-64)	3.2	3.0	2.8	5.8	7.0	1.2 pps
	High-skilled (15-64)	3.3	3.0	2.3	4.0	5.0	1.0 pps
	Nationals (15-64)	3.8	3.6	3.1	5.8	7.1	1.3 pps
	Non-nationals (15-64)	8.3	9.7	8.8	11.2	14.7	3.5 pps
	Male	3.3	3.5	3.0	6.5	8.2	1.7 pps
	Female	4.5	4.2	3.7	5.4	6.6	1.2 pps
12	- Long-term unemployment rate (% of total unemployment)	20.8	16.2	13.1	9.1	19.1	10.0 pps
13	- Worked hours (average actual weekly hours)	39.5	39.3	39.1	39.1	39.5	1.0 %
	Male	40.9	40.6	40.4	40.3	40.7	1.0 %
	Female	37.1	37.1	37.1	37.2	37.6	1.1 %
14	- Sectoral employment growth (% change)						
	Agriculture	-2.4	-2.4	1.3	-2.5	-2.5	0.0 pps
	Building and construction	6.9	4.3	1.0	-9.2	-6.8	2.4 pps
	Services	2.3	2.9	2.1	-1.5	-0.9	0.5 pps
	Manufacturing industry	-0.8	2.3	1.3	-9.7	-7.2	2.5 pps
15	- Indicator board on wage developments (% change)						
	Compensation per employee	3.5	3.6	3.6	2.4	2.7	0.3 pps
	Real compensation per employee based on GDP	1.4	1.3	-0.2	2.0	-0.7	-2.7 pps
	Hourly labour costs (Eurostat labour cost index)	3.0	3.3	3.7	2.8	3.1	0.3 pps
	Wage and salaries	5.4	6.5	5.8	-1.4	0.4	1.8 pps
	Labour productivity (GDP/person employed)	1.3	-1.1	-2.9	-2.2	3.9	6.1 pps

Germany	2006	2007	2008	2009	2010	2009-2010
1 - Population (total, 1000 pers.)	81489	81363	81265	80967	80760	-0.3 %
2 - Population (working age:15-64, 1000 pers.)	54533	54226	54066	53763	53546	-0.4 %
(% of total population)	66.9	66.6	66.5	66.4	66.3	-0.1 pps
3 - Labour force (15-64, 1000 pers.)	41078	41207	41374	41351	41015	-0.8 %
<i>Male</i>	22343	22317	22353	22272	22175	-0.4 %
<i>Female</i>	18735	18890	19021	19080	18839	-1.3 %
4 - Activity rate (% of population 15-64)	75.3	76.0	76.5	76.9	76.6	-0.3 pps
Young (15-24)	50.3	51.4	52.5	52.0	51.3	-0.7 pps
Prime age (25-54)	87.6	87.8	87.9	88.0	87.3	-0.7 pps
Older (55-64)	55.2	57.5	58.8	61.1	62.5	1.4 pps
Nationals (15-64)	76.3	77.1	77.6	78.0	77.7	-0.3 pps
Non-nationals (15-64)	66.9	67.1	67.3	68.0	67.5	-0.5 pps
<i>Male</i>	81.3	81.8	82.1	82.3	82.3	0.0 pps
Young (15-24)	52.9	53.7	54.9	54.4	53.7	-0.7 pps
Prime age (25-54)	93.8	93.8	93.6	93.4	93.1	-0.3 pps
Older (55-64)	64.0	66.1	67.3	69.4	70.8	1.4 pps
<i>Female</i>	69.3	70.1	70.8	71.4	70.8	-0.6 pps
Young (15-24)	47.6	49.0	49.9	49.6	48.9	-0.7 pps
Prime age (25-54)	81.4	81.8	82.1	82.5	81.3	-1.2 pps
Older (55-64)	46.6	49.1	50.6	54.0	54.5	1.5 pps
5 - Employment rate (% of population 15-64)	67.5	69.4	70.7	70.9	71.1	0.2 pps
Young (15-24)	43.4	45.3	46.9	46.2	46.2	0.0 pps
Prime age (25-54)	79.4	80.9	81.8	81.6	81.5	-0.1 pps
Older (55-64)	48.4	51.5	53.8	56.2	57.7	1.5 pps
Low-skilled (15-64)	47.3	46.6	40.6	40.1	40.7	0.6 pps
Medium-skilled (15-64)	74.4	77.9	75.8	73.9	73.6	-0.3 pps
High-skilled (15-64)	87.3	86.5	88.4	94.9	94.8	-0.2 pps
Nationals (15-64)	61.8	63.4	64.6	64.7	64.9	0.2 pps
Non-nationals (15-64)	5.5	5.8	6.0	6.2	6.2	0.0 pps
<i>Male</i>	72.8	74.7	75.9	75.6	76.0	0.5 pps
Young (15-24)	45.1	46.9	48.8	47.6	47.9	0.2 pps
Prime age (25-54)	84.9	86.4	87.2	86.2	86.5	0.3 pps
Older (55-64)	56.4	59.7	61.8	63.9	65.0	1.2 pps
<i>Female</i>	62.2	64.0	65.4	66.2	66.1	-0.1 pps
Young (15-24)	41.6	43.5	45.0	44.7	44.6	-0.2 pps
Prime age (25-54)	73.7	75.2	76.3	76.9	76.3	-0.6 pps
Older (55-64)	40.6	43.6	46.1	48.7	50.5	1.8 pps
6 - Employed persons (15-64, 1000 pers.)	36833.4	37611.5	38238.7	38130.6	38072.7	-0.2 %
7 - Employment growth (% , National accounts)	0.6	1.7	1.4	0.0	0.5	0.5 pps
Employment growth (% , 15-64, LFS)	:	:	:	:	:	: pps
<i>Male</i>	:	:	:	:	:	: pps
<i>Female</i>	:	:	:	:	:	: pps
8 - Self employed (% of total employment)	10.6	10.4	10.2	10.4	10.5	0.1 pps
<i>Male</i>	7.3	7.1	7.0	7.1	7.1	0.0 pps
<i>Female</i>	3.3	3.3	3.2	3.3	3.4	0.1 pps
9 - Temporary employment (% of total employment)	14.5	14.6	14.7	14.5	14.7	0.2 pps
<i>Male</i>	14.8	14.7	14.8	14.4	14.5	0.1 pps
<i>Female</i>	14.2	14.5	14.7	14.7	15.0	0.3 pps
10 - Part-time (% of total employment)	25.2	25.4	25.2	25.4	25.5	0.1 pps
<i>Male</i>	8.5	8.5	8.4	8.6	8.7	0.1 pps
<i>Female</i>	45.1	45.3	44.9	44.8	45.0	0.2 pps
11 - Unemployment rate (harmonised:15-74)	10.3	8.7	7.5	7.8	7.1	-0.7 pps
Young (15-24)	13.7	11.9	10.5	11.2	9.9	-1.3 pps
Prime age (25-49)	9.3	7.8	6.9	7.2	6.7	-0.5 pps
Older (55-64)	12.4	10.3	8.5	8.0	7.7	-0.3 pps
Low-skilled (15-64)	18.9	17.2	15.5	15.8	15.1	-0.7 pps
Medium-skilled (15-64)	10.0	8.3	7.2	7.6	7.0	-0.6 pps
High-skilled (15-64)	4.8	3.9	3.3	3.4	3.2	-0.2 pps
Nationals (15-64)	9.4	7.9	6.9	7.1	6.5	-0.6 pps
Non-nationals (15-64)	18.9	16.2	14.1	14.8	13.8	-1.0 pps
<i>Male</i>	10.3	8.6	7.4	8.1	7.5	-0.6 pps
<i>Female</i>	10.2	8.8	7.7	7.3	6.6	-0.7 pps
12 - Long-term unemployment rate (% of total unemployment)	56.4	56.6	52.6	45.5	47.4	1.9 pps
13 - Worked hours (average actual weekly hours)	42.2	42.3	42.1	41.4	41.7	0.7 %
<i>Male</i>	43.1	43.2	43.0	42.2	42.5	0.7 %
<i>Female</i>	40.3	40.4	40.4	39.8	40.0	0.5 %
14 - Sectoral employment growth (% change)						
Agriculture	-1.9	1.6	1.2	-0.1	-1.2	-1.1 pps
Building and construction	-0.2	1.6	-0.7	0.5	1.3	0.8 pps
Services	1.2	1.8	1.5	0.7	1.1	0.4 pps
Manufacturing industry	-0.8	1.2	1.6	-2.9	-1.7	1.2 pps
15 - Indicator board on wage developments (% change)						
Compensation per employee	1.1	0.9	2.0	0.2	2.0	1.8 pps
Real compensation per employee based on GDP	0.7	-0.9	0.9	-1.2	1.4	2.6 pps
Hourly labour costs (Eurostat labour cost index)	1.5	0.8	2.7	2.2	0.8	-1.4 pps
Wage and salaries	1.5	3.3	3.8	-0.2	:	: pps
Labour productivity (GDP/person employed)	2.7	1.0	-0.4	-4.7	3.1	7.8 pps

Estonia		2006	2007	2008	2009	2010	2009-2010
1	- Population (total, 1000 pers.)	1339	1338	1336	1336	1335	0.0 %
2	- Population (working age:15-64, 1000 pers.)	913	909	907	906	904	-0.2 %
	(% of total population)	68.1	68.0	67.9	67.8	67.7	-0.1 pps
3	- Labour force (15-64, 1000 pers.)	661	663	671	670	667	-0.4 %
	<i>Male</i>	332	338	340	337	333	-1.2 %
	<i>Female</i>	329	325	331	333	334	0.3 %
4	- Activity rate (% of population 15-64)	72.4	72.9	74.0	74.0	73.8	-0.2 pps
	Young (15-24)	35.9	38.3	41.4	39.9	38.3	-1.6 pps
	Prime age (25-54)	89.1	88.5	88.1	87.8	88.2	0.5 pps
	Older (55-64)	61.0	62.1	65.1	66.7	64.2	-2.5 pps
	Nationals (15-64)	71.8	72.2	73.0	72.8	72.6	-0.2 pps
	Non-nationals (15-64)	75.5	76.3	79.0	79.2	79.6	0.4 pps
	<i>Male</i>	75.8	77.5	78.3	77.6	76.8	-0.8 pps
	Young (15-24)	41.1	44.2	45.3	45.0	42.3	-2.8 pps
	Prime age (25-54)	92.8	93.6	92.9	91.9	91.8	-0.1 pps
	Older (55-64)	61.6	63.7	68.8	67.4	64.5	-2.9 pps
	<i>Female</i>	69.3	68.7	70.1	70.6	71.0	0.4 pps
	Young (15-24)	30.6	32.3	37.4	34.7	34.2	-0.4 pps
	Prime age (25-54)	85.7	83.7	83.6	83.9	84.9	1.0 pps
	Older (55-64)	60.4	61.0	62.3	66.1	63.9	-2.1 pps
5	- Employment rate (% of population 15-64)	68.1	69.4	69.8	63.5	61.0	-2.5 pps
	Young (15-24)	31.6	34.5	36.4	28.9	25.7	-3.2 pps
	Prime age (25-54)	84.2	84.8	83.9	76.4	74.8	-1.6 pps
	Older (55-64)	58.5	60.0	62.4	60.5	53.8	-6.7 pps
	Low-skilled (15-64)	32.1	33.0	35.2	25.3	23.5	-1.8 pps
	Medium-skilled (15-64)	69.8	72.7	73.9	64.6	62.3	-2.3 pps
	High-skilled (15-64)	95.5	90.3	86.9	89.3	85.3	-4.1 pps
	Nationals (15-64)	56.6	57.9	57.9	52.8	51.6	-1.2 pps
	Non-nationals (15-64)	11.5	11.5	12.0	10.7	9.4	-1.3 pps
	<i>Male</i>	71.1	73.2	73.6	64.1	61.5	-2.6 pps
	Young (15-24)	37.0	38.8	39.5	30.7	27.4	-3.3 pps
	Prime age (25-54)	87.6	89.7	88.5	77.4	75.7	-1.7 pps
	Older (55-64)	57.5	59.4	65.2	59.4	52.3	-7.2 pps
	<i>Female</i>	65.3	65.9	66.3	63.0	60.5	-2.5 pps
	Young (15-24)	26.0	30.0	33.2	27.0	24.0	-3.1 pps
	Prime age (25-54)	81.1	80.1	79.5	75.5	73.9	-1.6 pps
	Older (55-64)	59.1	60.4	60.3	61.2	54.9	-6.3 pps
6	- Employed persons (15-64, 1000 pers.)	621.1	630.7	633.5	575.8	551.8	-4.2 %
7	- Employment growth (% , National accounts)	5.4	0.8	0.2	-9.9	-4.8	5.1 pps
	Employment growth (% , 15-64, LFS)	:	:	:	:	:	pps
	<i>Male</i>	:	:	:	:	:	pps
	<i>Female</i>	:	:	:	:	:	pps
8	- Self employed (% of total employment)	7.9	8.7	7.5	8.0	7.9	0.0 pps
	<i>Male</i>	5.6	6.2	5.2	5.4	5.4	0.0 pps
	<i>Female</i>	2.3	2.5	2.3	2.6	2.5	0.0 pps
9	- Temporary employment (% of total employment)	2.7	2.2	2.4	2.5	3.7	1.2 pps
	<i>Male</i>	3.2	2.8	3.5	3.1	4.9	1.8 pps
	<i>Female</i>	:	:	:	2.0	2.7	0.7 pps
10	- Part-time (% of total employment)	6.7	7.2	6.4	9.4	9.8	0.4 pps
	<i>Male</i>	3.7	3.8	3.5	6.1	6.2	0.1 pps
	<i>Female</i>	9.7	10.6	9.3	12.5	13.1	0.6 pps
11	- Unemployment rate (harmonised:15-74)	5.9	4.7	5.5	13.8	16.9	3.1 pps
	Young (15-24)	12.0	10.0	12.0	27.5	32.9	5.4 pps
	Prime age (25-49)	5.6	4.3	4.7	13.0	15.4	2.4 pps
	Older (55-64)	:	:	:	9.4	16.2	6.8 pps
	Low-skilled (15-64)	13.5	11.7	12.2	29.9	32.4	2.5 pps
	Medium-skilled (15-64)	6.3	4.9	5.9	16.1	19.6	3.5 pps
	High-skilled (15-64)	3.3	:	3.0	6.4	9.5	3.1 pps
	Nationals (15-64)	5.0	4.0	4.6	12.1	14.5	2.4 pps
	Non-nationals (15-64)	11.0	8.5	10.2	22.6	29.7	7.1 pps
	<i>Male</i>	6.2	5.4	5.8	16.9	19.5	2.6 pps
	<i>Female</i>	5.6	3.9	5.3	10.6	14.3	3.7 pps
12	- Long-term unemployment rate (% of total unemployment)	48.2	49.2	30.1	27.4	45.3	17.9 pps
13	- Worked hours (average actual weekly hours)	41.3	41.3	40.6	39.5	40.5	2.5 %
	<i>Male</i>	42.0	41.9	41.1	39.9	41.2	3.3 %
	<i>Female</i>	40.6	40.6	40.0	39.0	39.8	2.1 %
14	- Sectoral employment growth (% change)						
	Agriculture	-2.5	-3.2	-17.0	-4.8	1.3	6.1 pps
	Building and construction	25.1	27.6	-3.8	-29.9	-26.1	3.8 pps
	Services	7.0	-1.4	1.4	-5.0	-2.8	2.2 pps
	Manufacturing industry	-2.3	-1.8	2.9	-15.9	-5.7	10.2 pps
15	- Indicator board on wage developments (% change)						
	Compensation per employee	14.1	24.6	10.1	-3.3	-0.2	3.1 pps
	Real compensation per employee based on GDP	5.3	12.7	2.7	-3.3	-1.7	1.6 pps
	Hourly labour costs (Eurostat labour cost index)	16.6	20.0	14.0	-1.9	-1.9	0.0 pps
	Wage and salaries	20.2	24.0	11.5	-14.5	:	pps
	Labour productivity (GDP/person employed)	4.9	6.1	-5.2	-4.4	8.3	12.7 pps

Ireland		2006	2007	2008	2009	2010	2009-2010
1	- Population (total, 1000 pers.)	4253	4357	4440	4468	4476	0.2 %
2	- Population (working age:15-64, 1000 pers.)	2919	2997	3041	3029	3002	-0.9 %
	(% of total population)	68.6	68.8	68.5	67.8	67.1	-0.7 pps
3	- Labour force (15-64, 1000 pers.)	2099	2174	2189	2128	2087	-1.9 %
	<i>Male</i>	1206	1236	1236	1184	1153	-2.6 %
	<i>Female</i>	893	938	953	944	934	-1.1 %
4	- Activity rate (% of population 15-64)	71.9	72.5	72.0	70.2	69.5	-0.7 pps
	Young (15-24)	55.0	55.4	52.6	46.7	42.0	-4.7 pps
	Prime age (25-54)	81.4	81.9	81.6	80.6	80.4	-0.2 pps
	Older (55-64)	54.4	55.1	55.5	54.6	54.8	0.2 pps
	Nationals (15-64)	71.1	71.5	71.0	69.5	69.0	-0.4 pps
	Non-nationals (15-64)	77.8	78.9	77.3	74.9	72.9	-2.0 pps
	<i>Male</i>	81.7	81.6	80.7	78.1	77.1	-1.0 pps
	Young (15-24)	59.3	58.8	55.2	48.0	42.8	-5.1 pps
	Prime age (25-54)	92.1	91.6	91.3	89.5	89.3	-0.2 pps
	Older (55-64)	68.6	69.6	68.6	66.3	65.1	-1.2 pps
	<i>Female</i>	61.9	63.3	63.1	62.4	62.0	-0.4 pps
	Young (15-24)	50.6	51.9	49.9	45.4	41.2	-4.2 pps
	Prime age (25-54)	70.5	71.9	71.8	71.7	71.6	-0.1 pps
	Older (55-64)	40.0	40.4	42.2	42.8	44.4	1.6 pps
5	- Employment rate (% of population 15-64)	68.7	69.2	67.6	61.8	60.0	-1.9 pps
	Young (15-24)	50.3	50.4	45.9	35.4	30.5	-4.9 pps
	Prime age (25-54)	78.3	78.6	77.3	72.0	70.3	-1.7 pps
	Older (55-64)	53.1	53.8	53.7	51.0	50.0	-1.0 pps
	Low-skilled (15-64)	47.7	46.9	44.1	36.5	31.9	-4.5 pps
	Medium-skilled (15-64)	78.5	80.2	76.3	67.3	62.2	-5.0 pps
	High-skilled (15-64)	106.6	105.9	104.4	96.4	92.0	-4.3 pps
	Nationals (15-64)	59.7	58.5	56.7	53.0	52.4	-0.6 pps
	Non-nationals (15-64)	8.9	10.6	10.9	8.8	7.6	-1.3 pps
	<i>Male</i>	77.9	77.5	74.9	66.3	63.9	-2.4 pps
	Young (15-24)	54.0	53.0	46.7	33.0	28.4	-4.6 pps
	Prime age (25-54)	88.4	87.7	85.5	77.2	75.0	-2.2 pps
	Older (55-64)	66.9	67.8	66.1	60.9	58.1	-2.8 pps
	<i>Female</i>	59.3	60.6	60.2	57.4	56.0	-1.3 pps
	Young (15-24)	46.5	47.8	45.1	37.7	32.5	-5.1 pps
	Prime age (25-54)	68.0	69.3	69.0	66.8	65.7	-1.1 pps
	Older (55-64)	39.0	39.5	41.1	41.0	41.9	0.9 pps
6	- Employed persons (15-64, 1000 pers.)	2004.6	2072.6	2054.8	1873.3	1799.9	-3.9 %
7	- Employment growth (% , National accounts)	4.3	3.7	-1.1	-8.2	-4.1	4.1 pps
	Employment growth (% , 15-64, LFS)	:	:	:	:	:	: pps
	<i>Male</i>	:	:	:	:	:	: pps
	<i>Female</i>	:	:	:	:	:	: pps
8	- Self employed (% of total employment)	14.8	15.4	15.7	15.7	15.3	-0.4 pps
	<i>Male</i>	12.4	12.7	12.8	12.8	12.2	-0.6 pps
	<i>Female</i>	2.4	2.6	2.8	2.9	3.1	0.1 pps
9	- Temporary employment (% of total employment)	6.0	8.0	8.4	8.5	9.3	0.8 pps
	<i>Male</i>	5.1	6.7	7.1	7.4	8.6	1.2 pps
	<i>Female</i>	6.9	9.5	9.8	9.5	10.0	0.5 pps
10	- Part-time (% of total employment)	16.6	17.3	18.1	20.7	21.9	1.2 pps
	<i>Male</i>	6.0	6.4	7.1	9.8	11.1	1.3 pps
	<i>Female</i>	30.8	31.6	31.9	33.4	34.2	0.8 pps
11	- Unemployment rate (harmonised:15-74)	4.5	4.6	6.3	11.9	13.7	1.8 pps
	Young (15-24)	8.6	9.0	12.7	24.2	27.5	3.3 pps
	Prime age (25-54)	3.9	4.1	5.4	11.2	13.0	1.8 pps
	Older (55-64)	2.4	2.4	3.3	6.5	8.6	2.1 pps
	Low-skilled (15-64)	7.0	7.6	10.1	18.0	22.0	4.0 pps
	Medium-skilled (15-64)	4.2	4.4	6.2	13.5	15.8	2.3 pps
	High-skilled (15-64)	2.7	2.7	3.4	6.9	7.6	0.7 pps
	Nationals (15-64)	4.1	4.4	5.8	11.3	13.2	1.9 pps
	Non-nationals (15-64)	6.8	6.1	7.7	15.8	17.3	1.5 pps
	<i>Male</i>	4.6	4.9	7.4	14.9	16.9	2.0 pps
	<i>Female</i>	4.2	4.1	4.9	8.0	9.7	1.7 pps
12	- Long-term unemployment rate (% of total unemployment)	31.6	29.6	27.1	29.0	49.0	20.0 pps
13	- Worked hours (average actual weekly hours)	40.8	40.5	40.2	39.5	39.6	0.3 %
	<i>Male</i>	42.6	42.4	42.0	41.4	41.6	0.5 %
	<i>Female</i>	37.2	36.9	36.8	36.2	36.4	0.6 %
14	- Sectoral employment growth (% change)						
	Agriculture	0.9	0.6	4.1	-16.3	-11.9	4.4 pps
	Building and construction	11.2	3.2	-11.1	-32.3	-23.4	8.9 pps
	Services	4.4	4.7	1.0	-2.8	-0.8	2.0 pps
	Manufacturing industry	-0.4	0.5	-4.7	-10.3	-6.3	4.0 pps
15	- Indicator board on wage developments (% change)						
	Compensation per employee	4.7	5.4	3.4	0.0	-1.8	-1.9 pps
	Real compensation per employee based on GDP	1.4	4.5	8.0	3.0	-0.8	-3.8 pps
	Hourly labour costs (Eurostat labour cost index)	:	:	:	:	:	: pps
	Wage and salaries	9.8	8.1	1.3	-8.3	:	: pps
	Labour productivity (GDP/person employed)	0.9	1.9	-2.4	0.6	3.2	2.6 pps

Greece		2006	2007	2008	2009	2010	2009-2010
1	- Population (total, 1000 pers.)	10710	10754	10780	10839	10882	0.4 %
2	- Population (working age:15-64, 1000 pers.)	7158	7208	7232	7222	7231	0.1 %
	(% of total population)	66.8	67.0	67.1	66.6	66.5	-0.2 pps
3	- Labour force (15-64, 1000 pers.)	4799	4829	4851	4894	4934	0.8 %
	Male	2825	2849	2860	2857	2858	0.0 %
	Female	1974	1981	1991	2036	2077	2.0 %
4	- Activity rate (% of population 15-64)	67.0	67.0	67.1	67.8	68.2	0.5 pps
	Young (15-24)	32.4	31.1	30.2	30.9	30.3	-0.6 pps
	Prime age (25-54)	82.0	81.9	82.0	82.8	83.3	0.5 pps
	Older (55-64)	43.9	43.9	44.2	44.2	45.1	0.9 pps
	Nationals (15-64)	66.6	66.6	66.6	67.1	67.5	0.4 pps
	Non-nationals (15-64)	74.2	73.3	73.6	74.8	75.8	1.0 pps
	Male	79.1	79.1	79.1	79.0	78.9	-0.2 pps
	Young (15-24)	36.1	34.7	34.3	34.4	33.4	-1.0 pps
	Prime age (25-54)	94.7	94.6	94.4	94.4	94.2	-0.2 pps
	Older (55-64)	61.0	60.8	60.9	60.1	60.2	0.1 pps
	Female	55.0	54.9	55.1	56.5	57.6	1.1 pps
	Young (15-24)	28.7	27.6	26.1	27.4	27.3	-0.2 pps
	Prime age (25-54)	69.1	69.1	69.4	71.0	72.2	1.2 pps
	Older (55-64)	28.0	28.2	28.6	29.3	30.9	1.6 pps
5	- Employment rate (% of population 15-64)	61.0	61.4	61.9	61.2	59.6	-1.7 pps
	Young (15-24)	24.2	24.0	23.6	22.9	20.3	-2.6 pps
	Prime age (25-54)	75.3	75.6	76.1	75.4	73.3	-2.1 pps
	Older (55-64)	42.3	42.4	42.8	42.2	42.3	0.1 pps
	Low-skilled (15-64)	49.0	52.0	52.7	50.1	47.3	-2.8 pps
	Medium-skilled (15-64)	60.5	60.2	59.5	61.8	59.7	-2.2 pps
	High-skilled (15-64)	98.3	90.2	93.2	87.8	86.5	-1.3 pps
	Nationals (15-64)	56.9	56.9	56.8	55.4	53.9	-1.5 pps
	Non-nationals (15-64)	4.1	4.4	5.1	5.8	5.6	-0.2 pps
	Male	74.6	74.9	75.0	73.5	70.9	-2.6 pps
	Young (15-24)	29.7	29.2	28.5	27.7	24.5	-3.2 pps
	Prime age (25-54)	90.0	90.1	90.2	88.4	85.3	-3.0 pps
	Older (55-64)	59.2	59.1	59.1	57.7	56.5	-1.2 pps
	Female	47.4	47.9	48.7	48.9	48.1	-0.8 pps
	Young (15-24)	18.7	18.7	18.5	18.1	16.2	-2.0 pps
	Prime age (25-54)	60.5	60.8	61.9	62.2	61.1	-1.2 pps
	Older (55-64)	26.6	26.9	27.5	27.7	28.9	1.2 pps
6	- Employed persons (15-64, 1000 pers.)	4365.3	4423.5	4473.7	4423.2	4306.5	-2.6 %
7	- Employment growth (% , National accounts)	3.3	1.7	0.2	-0.7	-2.1	-1.4 pps
	Employment growth (% , 15-64, LFS)	:	:	:	:	:	pps
	Male	:	:	:	:	:	pps
	Female	:	:	:	:	:	pps
8	- Self employed (% of total employment)	29.2	28.7	28.8	29.2	29.6	0.4 pps
	Male	21.1	20.9	20.6	20.9	20.9	0.0 pps
	Female	8.1	7.8	8.2	8.3	8.7	0.4 pps
9	- Temporary employment (% of total employment)	10.7	10.9	11.5	12.1	12.4	0.3 pps
	Male	9.1	9.3	9.9	10.6	11.0	0.4 pps
	Female	13.0	13.2	13.7	14.1	14.4	0.3 pps
10	- Part-time (% of total employment)	5.5	5.4	5.4	5.8	6.2	0.4 pps
	Male	2.6	2.5	2.5	2.9	3.4	0.5 pps
	Female	9.9	9.9	9.8	10.1	10.2	0.1 pps
11	- Unemployment rate (harmonised:15-74)	8.9	8.3	7.7	9.5	12.6	3.1 pps
	Young (15-24)	25.2	22.9	22.1	25.8	32.9	7.1 pps
	Prime age (25-49)	8.6	8.3	7.6	9.4	12.6	3.2 pps
	Older (55-64)	3.7	3.4	3.2	4.6	6.3	1.7 pps
	Low-skilled (15-64)	8.3	7.8	7.6	9.7	12.9	3.2 pps
	Medium-skilled (15-64)	10.7	9.8	8.8	11.0	14.5	3.5 pps
	High-skilled (15-64)	7.3	7.1	6.3	7.4	9.8	2.4 pps
	Nationals (15-64)	9.1	8.5	7.9	9.5	12.5	3.0 pps
	Non-nationals (15-64)	7.9	7.5	6.8	10.5	15.0	4.5 pps
	Male	5.6	5.2	5.1	6.9	9.9	3.0 pps
	Female	13.6	12.8	11.4	13.2	16.2	3.0 pps
12	- Long-term unemployment rate (% of total unemployment)	54.3	49.9	47.5	40.8	45.0	4.2 pps
13	- Worked hours (average actual weekly hours)	42.7	42.4	42.2	42.1	42.3	0.5 %
	Male	44.0	43.7	43.5	43.4	43.5	0.2 %
	Female	40.4	40.1	40.1	39.9	40.2	0.8 %
14	- Sectoral employment growth (% change)						
	Agriculture	-1.6	-3.0	-0.1	1.4	1.7	0.3 pps
	Building and construction	0.2	6.3	-1.1	-4.3	-10.7	-6.4 pps
	Services	5.0	2.1	0.4	-0.5	-1.2	-0.7 pps
	Manufacturing industry	0.8	1.2	-0.4	-1.6	-5.7	-4.1 pps
15	- Indicator board on wage developments (% change)						
	Compensation per employee	3.6	6.1	7.0	3.6	-3.5	-7.1 pps
	Real compensation per employee based on GDP	:	:	:	:	:	pps
	Hourly labour costs (Eurostat labour cost index)	2.2	3.3	2.7	7.6	-1.0	-8.6 pps
	Wage and salaries	9.0	7.6	6.6	4.2	:	pps
	Labour productivity (GDP/person employed)	1.8	2.5	0.8	-1.3	-2.4	-1.1 pps

Spain	2006	2007	2008	2009	2010	2009-2010
1 - Population (total, 1000 pers.)	43835	44630	45329	45671	45820	0.3 %
2 - Population (working age:15-64, 1000 pers.)	30255	30808	31252	31349	31261	-0.3 %
(% of total population)	69.0	69.0	68.9	68.6	68.2	-0.4 pps
3 - Labour force (15-64, 1000 pers.)	21435	22043	22689	22881	22933	0.2 %
Male	12432	12702	12933	12844	12730	-0.9 %
Female	9003	9341	9756	10037	10203	1.7 %
4 - Activity rate (% of population 15-64)	70.8	71.6	72.6	73.0	73.4	0.4 pps
Young (15-24)	48.2	47.8	47.7	45.1	42.7	-2.4 pps
Prime age (25-54)	82.0	82.8	83.8	84.7	85.5	0.9 pps
Older (55-64)	46.8	47.4	49.2	50.2	50.8	0.6 pps
Nationals (15-64)	69.7	70.5	71.5	71.9	72.2	0.3 pps
Non-nationals (15-64)	80.0	78.5	79.1	79.0	80.0	0.9 pps
Male	81.3	81.4	81.8	81.0	80.7	-0.3 pps
Young (15-24)	52.2	52.1	51.5	48.3	45.1	-3.3 pps
Prime age (25-54)	92.5	92.6	92.6	92.3	92.5	0.2 pps
Older (55-64)	63.5	63.1	65.1	64.0	63.9	-0.1 pps
Female	60.2	61.4	63.2	64.8	65.9	1.1 pps
Young (15-24)	43.9	43.3	43.7	41.7	40.1	-1.5 pps
Prime age (25-54)	71.2	72.7	74.7	76.7	78.3	1.6 pps
Older (55-64)	31.0	32.5	34.2	37.2	38.5	1.3 pps
5 - Employment rate (% of population 15-64)	64.8	65.6	64.3	59.8	58.6	-1.2 pps
Young (15-24)	39.5	39.1	36.0	28.0	24.9	-3.1 pps
Prime age (25-54)	75.8	76.8	75.3	70.7	69.6	-1.1 pps
Older (55-64)	44.1	44.6	45.6	44.1	43.6	-0.5 pps
Low-skilled (15-64)	54.2	55.7	56.1	49.9	47.1	-2.9 pps
Medium-skilled (15-64)	80.2	79.2	74.0	66.3	62.5	-3.8 pps
High-skilled (15-64)	97.6	96.2	89.1	85.1	83.5	-1.6 pps
Nationals (15-64)	56.7	56.6	55.0	51.4	50.4	-1.0 pps
Non-nationals (15-64)	8.1	9.0	9.3	8.4	8.1	-0.2 pps
Male	76.1	76.2	73.5	66.6	64.7	-1.9 pps
Young (15-24)	44.4	44.2	39.3	29.5	25.6	-3.8 pps
Prime age (25-54)	87.6	87.6	84.4	77.3	75.7	-1.6 pps
Older (55-64)	60.4	60.0	60.9	56.7	54.7	-2.0 pps
Female	53.2	54.7	54.9	52.8	52.3	-0.5 pps
Young (15-24)	34.4	33.8	32.5	26.5	24.2	-2.3 pps
Prime age (25-54)	63.7	65.6	65.9	63.8	63.2	-0.5 pps
Older (55-64)	28.7	30.0	31.1	32.3	33.2	0.9 pps
6 - Employed persons (15-64, 1000 pers.)	19600.2	20211.3	20102.8	18736.0	18304.1	-2.3 %
7 - Employment growth (% , National accounts)	3.9	3.0	-0.4	-6.6	-2.3	4.3 pps
Employment growth (% , 15-64, LFS)	:	:	:	:	:	pps
Male	:	:	:	:	:	pps
Female	:	:	:	:	:	pps
8 - Self employed (% of total employment)	16.2	16.3	16.3	15.7	15.7	0.0 pps
Male	11.5	11.5	11.4	10.8	10.8	0.0 pps
Female	4.7	4.8	4.9	5.0	4.9	0.0 pps
9 - Temporary employment (% of total employment)	34.1	31.7	29.3	25.5	25.0	-0.5 pps
Male	32.1	30.6	27.7	23.8	23.9	0.1 pps
Female	36.8	33.1	31.4	27.3	26.2	-1.1 pps
10 - Part-time (% of total employment)	11.8	11.6	11.8	12.6	13.1	0.5 pps
Male	4.1	3.9	4.0	4.7	5.2	0.5 pps
Female	23.0	22.7	22.6	22.9	23.1	0.2 pps
11 - Unemployment rate (harmonised:15-74)	8.5	8.3	11.3	18.0	20.1	2.1 pps
Young (15-24)	17.9	18.2	24.6	37.8	41.6	3.8 pps
Prime age (25-49)	7.7	7.4	10.4	17.1	19.2	2.1 pps
Older (55-64)	5.7	5.9	7.3	12.1	14.1	2.0 pps
Low-skilled (15-64)	10.5	10.5	15.4	24.7	27.5	2.8 pps
Medium-skilled (15-64)	8.1	8.1	10.6	17.1	19.3	2.2 pps
High-skilled (15-64)	6.1	5.3	6.4	9.8	11.3	1.5 pps
Nationals (15-64)	8.1	7.7	10.3	16.1	18.3	2.2 pps
Non-nationals (15-64)	11.8	12.2	17.5	28.5	30.2	1.7 pps
Male	6.3	6.4	10.1	17.7	19.7	2.0 pps
Female	11.6	10.9	13.0	18.4	20.5	2.1 pps
12 - Long-term unemployment rate (% of total unemployment)	21.7	20.4	17.8	23.7	36.6	12.9 pps
13 - Worked hours (average actual weekly hours)	41.3	41.1	41.0	40.7	40.7	0.0 %
Male	42.2	42.0	41.9	41.6	41.6	0.0 %
Female	39.5	39.5	39.4	39.2	39.3	0.3 %
14 - Sectoral employment growth (% change)						
Agriculture	-5.7	-2.0	-4.9	-3.5	0.8	4.3 pps
Building and construction	6.0	5.6	-10.2	-22.5	-12.1	10.4 pps
Services	5.3	3.8	2.1	-2.5	-0.5	2.0 pps
Manufacturing industry	-0.2	-0.8	-1.4	-14.4	-5.8	8.6 pps
15 - Indicator board on wage developments (% change)						
Compensation per employee	3.3	4.6	6.2	3.9	0.6	-3.3 pps
Real compensation per employee based on GDP	-0.1	1.4	3.9	3.5	-0.3	-3.8 pps
Hourly labour costs (Eurostat labour cost index)	3.3	4.7	5.0	5.0	0.7	-4.3 pps
Wage and salaries	7.8	8.2	6.0	-2.5	:	pps
Labour productivity (GDP/person employed)	0.1	0.5	1.3	3.1	2.2	-0.9 pps

France	2006	2007	2008	2009	2010	2009-2010
1 - Population (total, 1000 pers.)	60124	60482	60797	61104	61410	0.5 %
2 - Population (working age:15-64, 1000 pers.)	39314	39555	39714	39841	39972	0.3 %
(% of total population)	65.4	65.4	65.3	65.2	65.1	-0.1 pps
3 - Labour force (15-64, 1000 pers.)	27473	27665	27843	28124	28214	0.3 %
Male	14501	14544	14610	14717	14748	0.2 %
Female	12972	13121	13234	13407	13466	0.4 %
4 - Activity rate (% of population 15-64)	69.9	69.9	70.1	70.6	70.6	0.0 pps
Young (15-24)	38.4	38.7	39.0	40.4	39.7	-0.7 pps
Prime age (25-54)	87.8	88.2	88.7	88.8	88.9	0.1 pps
Older (55-64)	40.4	40.2	40.0	41.4	42.5	1.1 pps
Nationals (15-64)	70.3	70.3	70.5	71.0	71.0	0.0 pps
Non-nationals (15-64)	63.8	63.9	64.8	64.1	64.5	0.5 pps
Male	75.0	74.8	74.8	75.1	75.0	-0.1 pps
Young (15-24)	42.2	42.1	42.5	43.6	43.3	-0.3 pps
Prime age (25-54)	94.2	94.2	94.5	94.4	94.2	-0.1 pps
Older (55-64)	43.0	42.7	42.6	44.2	45.2	1.0 pps
Female	64.9	65.3	65.6	66.2	66.3	0.1 pps
Young (15-24)	34.6	35.4	35.5	37.2	36.1	-1.1 pps
Prime age (25-54)	81.7	82.4	83.1	83.5	83.8	0.3 pps
Older (55-64)	37.9	37.8	37.6	38.8	40.0	1.3 pps
5 - Employment rate (% of population 15-64)	63.7	64.3	64.9	64.1	64.0	-0.2 pps
Young (15-24)	30.2	31.4	31.9	31.2	30.8	-0.4 pps
Prime age (25-54)	81.2	82.0	83.1	82.0	81.8	-0.2 pps
Older (55-64)	38.1	38.2	38.2	38.8	39.7	0.9 pps
Low-skilled (15-64)	45.1	44.1	44.4	42.8	42.9	0.1 pps
Medium-skilled (15-64)	71.5	73.2	72.7	70.5	69.1	-1.4 pps
High-skilled (15-64)	89.2	90.0	87.5	88.0	87.4	-0.6 pps
Nationals (15-64)	60.7	61.2	61.5	61.0	60.6	-0.4 pps
Non-nationals (15-64)	3.0	3.1	3.3	3.1	3.4	0.2 pps
Male	68.9	69.2	69.6	68.4	68.3	-0.2 pps
Young (15-24)	33.7	34.4	34.7	33.3	33.9	0.5 pps
Prime age (25-54)	87.9	88.3	89.1	87.6	87.1	-0.5 pps
Older (55-64)	40.5	40.5	40.6	41.3	42.1	0.8 pps
Female	58.6	59.7	60.4	60.0	59.9	-0.1 pps
Young (15-24)	26.7	28.4	29.0	29.1	27.7	-1.4 pps
Prime age (25-54)	74.7	76.0	77.2	76.6	76.7	0.0 pps
Older (55-64)	35.8	36.0	35.9	36.5	37.5	1.0 pps
6 - Employed persons (15-64, 1000 pers.)	25044.5	25447.9	25780.4	25554.6	25578.0	0.1 %
7 - Employment growth (% , National accounts)	1.0	1.4	0.6	-1.2	0.0	1.2 pps
Employment growth (% , 15-64, LFS)	:	:	:	:	:	pps
Male	:	:	:	:	:	pps
Female	:	:	:	:	:	pps
8 - Self employed (% of total employment)	10.3	10.1	9.8	10.2	10.7	0.5 pps
Male	7.4	7.2	6.9	7.2	7.6	0.4 pps
Female	2.9	2.9	3.0	3.0	3.1	0.2 pps
9 - Temporary employment (% of total employment)	14.9	15.2	15.0	14.4	15.1	0.7 pps
Male	14.1	14.1	13.7	13.0	14.1	1.1 pps
Female	15.8	16.3	16.3	15.9	16.0	0.1 pps
10 - Part-time (% of total employment)	17.1	17.2	16.8	17.2	17.5	0.3 pps
Male	5.6	5.5	5.5	5.7	6.4	0.7 pps
Female	30.2	30.3	29.4	29.8	29.8	0.0 pps
11 - Unemployment rate (harmonised:15-74)	9.2	8.4	7.8	9.5	9.8	0.3 pps
Young (15-24)	21.4	18.9	18.4	22.8	22.5	-0.3 pps
Prime age (25-49)	7.8	7.2	6.5	8.0	8.3	0.3 pps
Older (55-64)	5.7	5.1	4.6	6.2	6.7	0.5 pps
Low-skilled (15-64)	13.2	12.3	11.8	14.3	15.4	1.1 pps
Medium-skilled (15-64)	8.1	7.1	6.9	8.8	8.8	0.0 pps
High-skilled (15-64)	5.9	5.4	4.5	5.5	5.5	0.0 pps
Nationals (15-64)	8.4	7.5	7.0	8.6	8.9	0.3 pps
Non-nationals (15-64)	16.7	16.4	14.1	17.9	17.2	-0.7 pps
Male	8.5	7.8	7.3	9.3	9.4	0.1 pps
Female	10.1	9.0	8.4	9.8	10.2	0.4 pps
12 - Long-term unemployment rate (% of total unemployment)	42.0	40.2	37.5	35.1	40.1	5.0 pps
13 - Worked hours (average actual weekly hours)	39.6	39.6	39.5	39.3	39.8	1.3 %
Male	40.9	40.8	40.7	40.6	40.9	0.7 %
Female	37.7	37.6	37.7	37.5	38.0	1.3 %
14 - Sectoral employment growth (% change)						
Agriculture	-2.4	-2.5	-3.6	:	:	pps
Building and construction	4.4	4.1	3.1	:	:	pps
Services	1.4	1.8	0.9	:	:	pps
Manufacturing industry	-1.9	-0.7	-1.3	:	:	pps
15 - Indicator board on wage developments (% change)						
Compensation per employee	3.3	2.5	2.5	1.6	2.0	0.4 pps
Real compensation per employee based on GDP	1.0	-0.1	-0.1	1.4	1.3	-0.1 pps
Hourly labour costs (Eurostat labour cost index)	4.0	4.0	3.5	0.9	3.2	2.3 pps
Wage and salaries	4.5	4.2	3.1	0.0	:	pps
Labour productivity (GDP/person employed)	1.5	0.8	-0.7	-1.5	1.4	2.9 pps

Italy	2006	2007	2008	2009	2010	2009-2010
1 - Population (total, 1000 pers.)	58435	58880	59336	59752	60051	0.5 %
2 - Population (working age:15-64, 1000 pers.)	38726	38946	39182	39406	39546	0.4 %
(% of total population)	66.3	66.1	66.0	65.9	65.9	-0.1 pps
3 - Labour force (15-64, 1000 pers.)	24287	24350	24696	24591	24594	0.0 %
Male	14445	14483	14571	14498	14457	-0.3 %
Female	9842	9867	10125	10093	10137	0.4 %
4 - Activity rate (% of population 15-64)	62.7	62.5	63.0	62.4	62.2	-0.2 pps
Young (15-24)	32.5	30.9	30.9	29.1	28.4	-0.7 pps
Prime age (25-54)	77.8	77.6	78.1	77.2	76.9	-0.3 pps
Older (55-64)	33.4	34.6	35.5	37.0	38.0	1.0 pps
Nationals (15-64)	62.1	61.9	62.3	61.6	61.4	-0.2 pps
Non-nationals (15-64)	73.7	73.2	73.3	72.7	71.4	-1.3 pps
Male	74.6	74.4	74.4	73.7	73.3	-0.4 pps
Young (15-24)	37.8	36.1	35.9	34.0	33.2	-0.9 pps
Prime age (25-54)	91.3	91.0	91.0	90.0	89.4	-0.6 pps
Older (55-64)	45.0	46.3	47.0	48.5	49.6	1.0 pps
Female	50.8	50.7	51.6	51.1	51.1	0.0 pps
Young (15-24)	26.9	25.5	25.7	23.9	23.4	-0.5 pps
Prime age (25-54)	64.3	64.1	65.2	64.5	64.4	-0.1 pps
Older (55-64)	22.5	23.5	24.7	26.1	27.0	0.9 pps
5 - Employment rate (% of population 15-64)	58.4	58.7	58.7	57.5	56.9	-0.6 pps
Young (15-24)	25.5	24.7	24.4	21.7	20.5	-1.2 pps
Prime age (25-54)	73.3	73.5	73.5	71.9	71.1	-0.8 pps
Older (55-64)	32.5	33.8	34.4	35.7	36.6	0.8 pps
Low-skilled (15-64)	43.0	44.5	44.3	43.0	42.1	-0.9 pps
Medium-skilled (15-64)	71.1	70.6	70.0	69.5	69.2	-0.3 pps
High-skilled (15-64)	97.3	97.1	94.3	88.1	83.8	-4.3 pps
Nationals (15-64)	54.9	54.8	54.3	52.7	51.6	-1.0 pps
Non-nationals (15-64)	3.5	3.8	4.4	4.8	5.2	0.4 pps
Male	70.5	70.7	70.3	68.6	67.7	-0.9 pps
Young (15-24)	30.6	29.6	29.1	26.1	24.3	-1.8 pps
Prime age (25-54)	87.2	87.3	86.7	84.7	83.5	-1.2 pps
Older (55-64)	43.7	45.1	45.5	46.7	47.6	0.9 pps
Female	46.3	46.6	47.2	46.4	46.1	-0.2 pps
Young (15-24)	20.1	19.5	19.4	17.0	16.5	-0.5 pps
Prime age (25-54)	59.3	59.6	60.2	59.1	58.7	-0.4 pps
Older (55-64)	21.9	23.0	24.0	25.4	26.2	0.8 pps
6 - Employed persons (15-64, 1000 pers.)	22618.5	22846.2	23010.5	22650.1	22496.5	-0.7 %
7 - Employment growth (% , National accounts)	2.0	1.3	0.3	-1.7	-0.7	1.0 pps
Employment growth (% , 15-64, LFS)	:	:	:	:	:	pps
Male	:	:	:	:	:	pps
Female	:	:	:	:	:	pps
8 - Self employed (% of total employment)	23.7	23.4	22.9	22.5	22.7	0.2 pps
Male	16.8	16.7	16.3	16.1	16.3	0.2 pps
Female	6.9	6.8	6.6	6.4	6.4	0.0 pps
9 - Temporary employment (% of total employment)	13.1	13.2	13.3	12.5	12.8	0.3 pps
Male	11.2	11.2	11.5	10.8	11.4	0.6 pps
Female	15.8	16.0	15.7	14.6	14.5	-0.1 pps
10 - Part-time (% of total employment)	13.1	13.4	14.1	14.1	14.8	0.7 pps
Male	4.3	4.6	4.8	4.7	5.1	0.4 pps
Female	26.4	26.8	27.8	27.9	29.0	1.1 pps
11 - Unemployment rate (harmonised:15-74)	6.8	6.1	6.7	7.8	8.4	0.6 pps
Young (15-24)	21.6	20.3	21.3	25.4	27.8	2.4 pps
Prime age (25-49)	6.3	5.8	6.4	7.4	8.1	0.7 pps
Older (55-64)	2.9	2.4	3.1	3.4	3.6	0.2 pps
Low-skilled (15-64)	8.2	7.5	8.6	9.6	10.5	0.9 pps
Medium-skilled (15-64)	6.2	5.7	6.2	7.3	8.0	0.7 pps
High-skilled (15-64)	5.3	4.5	4.6	5.6	5.8	0.2 pps
Nationals (15-64)	6.8	6.0	6.7	7.6	8.2	0.6 pps
Non-nationals (15-64)	8.6	8.3	8.5	11.2	11.7	0.5 pps
Male	5.4	4.9	5.5	6.8	7.6	0.8 pps
Female	8.8	7.9	8.5	9.3	9.7	0.4 pps
12 - Long-term unemployment rate (% of total unemployment)	49.6	47.4	45.6	44.4	48.4	4.0 pps
13 - Worked hours (average actual weekly hours)	40.4	40.6	40.4	39.9	40.1	0.5 %
Male	41.7	41.9	41.7	41.1	41.3	0.5 %
Female	37.7	37.8	37.7	37.4	37.6	0.5 %
14 - Sectoral employment growth (% change)						
Agriculture	2.0	-2.4	-2.0	-2.6	1.7	4.3 pps
Building and construction	1.3	3.2	0.3	-1.2	-1.4	-0.2 pps
Services	2.4	1.5	0.7	-0.8	0.1	0.9 pps
Manufacturing industry	0.9	0.7	-0.8	-4.5	-3.8	0.7 pps
15 - Indicator board on wage developments (% change)						
Compensation per employee	2.2	2.1	3.0	-0.1	1.9	2.0 pps
Real compensation per employee based on GDP	0.8	-0.2	1.0	-0.7	1.4	2.1 pps
Hourly labour costs (Eurostat labour cost index)	1.8	2.3	4.2	4.7	2.0	-2.7 pps
Wage and salaries	5.1	3.9	3.7	-0.6	:	pps
Labour productivity (GDP/person employed)	0.1	0.2	-1.6	-3.6	2.0	5.6 pps

Cyprus		2006	2007	2008	2009	2010	2009-2010
1	- Population (total, 1000 pers.)	737	752	758	763	771	1.1 %
2	- Population (working age:15-64, 1000 pers.)	500	518	524	528	534	1.2 %
	(% of total population)	67.9	68.9	69.1	69.2	69.3	0.0 pps
3	- Labour force (15-64, 1000 pers.)	365	383	386	391	398	1.8 %
	Male	202	209	210	213	215	0.8 %
	Female	164	174	176	178	183	3.0 %
4	- Activity rate (% of population 15-64)	73.0	73.9	73.6	73.9	74.4	0.5 pps
	Young (15-24)	41.5	41.6	41.8	41.1	40.6	-0.5 pps
	Prime age (25-54)	86.2	86.7	86.4	86.6	87.2	0.6 pps
	Older (55-64)	55.4	57.7	56.6	58.5	59.6	1.1 pps
	Nationals (15-64)	72.6	73.7	73.0	73.5	73.2	-0.2 pps
	Non-nationals (15-64)	76.0	75.5	76.8	76.1	79.1	3.0 pps
	Male	82.8	82.9	82.0	82.0	81.7	-0.3 pps
	Young (15-24)	44.9	43.9	43.2	42.2	40.3	-1.9 pps
	Prime age (25-54)	95.3	95.0	94.0	93.5	93.5	0.0 pps
	Older (55-64)	74.1	74.9	73.0	74.8	75.0	0.2 pps
	Female	63.8	65.4	65.7	66.2	67.4	1.2 pps
	Young (15-24)	38.3	39.7	40.5	40.2	40.8	0.6 pps
	Prime age (25-54)	77.4	78.7	79.1	79.7	80.9	1.2 pps
	Older (55-64)	37.8	41.5	41.1	42.7	44.8	2.1 pps
5	- Employment rate (% of population 15-64)	69.6	71.0	70.8	69.9	69.7	-0.2 pps
	Young (15-24)	37.4	37.5	38.0	35.5	33.8	-1.7 pps
	Prime age (25-54)	82.6	83.8	83.7	82.6	82.5	-0.1 pps
	Older (55-64)	53.6	55.9	54.8	55.9	56.8	0.8 pps
	Low-skilled (15-64)	50.9	46.3	45.3	50.1	51.1	1.0 pps
	Medium-skilled (15-64)	86.2	90.3	79.6	75.7	72.2	-3.5 pps
	High-skilled (15-64)	98.9	109.9	110.6	100.1	93.1	-7.0 pps
	Nationals (15-64)	60.0	60.6	58.6	57.5	55.0	-2.5 pps
	Non-nationals (15-64)	9.6	10.3	12.3	12.5	14.7	2.3 pps
	Male	79.4	80.0	79.2	77.6	76.6	-1.0 pps
	Young (15-24)	40.9	39.1	39.5	36.4	33.8	-2.6 pps
	Prime age (25-54)	92.0	92.4	91.4	89.2	88.4	-0.8 pps
	Older (55-64)	71.7	72.6	70.8	71.6	71.3	-0.2 pps
	Female	60.3	62.4	62.8	62.5	63.0	0.5 pps
	Young (15-24)	34.2	35.9	36.7	34.5	33.7	-0.9 pps
	Prime age (25-54)	73.6	75.5	76.3	76.0	76.6	0.6 pps
	Older (55-64)	36.5	40.4	39.4	40.9	43.1	2.2 pps
6	- Employed persons (15-64, 1000 pers.)	348.3	367.9	371.1	369.3	372.3	0.8 %
7	- Employment growth (% , National accounts)	1.8	3.2	2.8	-0.7	-0.3	0.4 pps
	Employment growth (% , 15-64, LFS)	:	:	:	:	:	: pps
	Male	:	:	:	:	:	: pps
	Female	:	:	:	:	:	: pps
8	- Self employed (% of total employment)	18.4	17.5	16.9	16.6	15.5	-1.1 pps
	Male	13.6	13.0	12.6	11.9	11.0	-0.9 pps
	Female	4.8	4.5	4.3	4.7	4.5	-0.2 pps
9	- Temporary employment (% of total employment)	13.2	13.3	14.0	13.5	13.6	0.1 pps
	Male	7.9	7.6	8.2	7.5	6.9	-0.6 pps
	Female	19.0	19.2	20.0	19.9	20.6	0.7 pps
10	- Part-time (% of total employment)	6.6	6.4	6.8	7.4	8.1	0.7 pps
	Male	2.8	3.0	3.4	3.9	4.9	1.0 pps
	Female	11.3	10.4	10.8	11.5	11.8	0.3 pps
11	- Unemployment rate (harmonised:15-74)	4.6	4.0	3.6	5.3	6.3	1.0 pps
	Young (15-24)	10.0	10.2	9.0	13.8	16.7	2.9 pps
	Prime age (25-49)	4.1	3.3	3.3	4.7	5.7	1.0 pps
	Older (55-64)	3.3	3.1	3.2	4.3	4.7	0.4 pps
	Low-skilled (15-64)	5.1	5.1	5.2	6.6	7.7	1.1 pps
	Medium-skilled (15-64)	4.6	4.0	3.7	5.6	6.3	0.7 pps
	High-skilled (15-64)	4.4	3.4	3.0	4.5	5.7	1.2 pps
	Nationals (15-64)	4.5	3.7	3.4	4.9	5.7	0.8 pps
	Non-nationals (15-64)	5.8	5.7	5.4	8.0	8.7	0.7 pps
	Male	4.0	3.4	3.1	5.2	6.2	1.0 pps
	Female	5.4	4.6	4.2	5.5	6.5	1.0 pps
12	- Long-term unemployment rate (% of total unemployment)	19.3	18.6	13.6	10.3	20.3	10.0 pps
13	- Worked hours (average actual weekly hours)	40.7	40.4	40.5	40.2	40.7	1.2 %
	Male	41.9	41.7	41.8	41.6	41.9	0.7 %
	Female	39.0	38.7	38.7	38.4	39.2	2.1 %
14	- Sectoral employment growth (% change)						
	Agriculture	-14.1	10.7	-3.0	6.3	1.1	-5.2 pps
	Building and construction	3.9	4.9	3.1	-5.4	-2.1	3.3 pps
	Services	2.7	2.9	3.3	-0.4	-0.1	0.3 pps
	Manufacturing industry	1.0	1.0	1.2	-1.2	0.8	2.0 pps
15	- Indicator board on wage developments (% change)						
	Compensation per employee	2.9	3.0	2.3	3.2	2.8	-0.4 pps
	Real compensation per employee based on GDP	0.0	-1.6	-2.6	3.6	0.8	-2.8 pps
	Hourly labour costs (Eurostat labour cost index)	4.7	3.6	6.2	3.8	1.9	-1.9 pps
	Wage and salaries	6.9	7.4	8.3	2.9	:	: pps
	Labour productivity (GDP/person employed)	2.3	1.8	0.8	-1.0	1.3	2.3 pps

Latvia	2006	2007	2008	2009	2010	2009-2010
1 - Population (total, 1000 pers.)	2294	2281	2271	2261	2248	-0.6 %
2 - Population (working age:15-64, 1000 pers.)	1580	1573	1568	1560	1549	-0.7 %
(% of total population)	68.9	69.0	69.0	69.0	68.9	-0.1 pps
3 - Labour force (15-64, 1000 pers.)	1126	1145	1167	1153	1134	-1.7 %
Male	581	591	597	583	570	-2.1 %
Female	545	555	570	570	564	-1.2 %
4 - Activity rate (% of population 15-64)	71.3	72.8	74.4	73.9	73.2	-0.7 pps
Young (15-24)	40.8	43.0	42.9	41.7	40.4	-1.3 pps
Prime age (25-54)	86.4	87.2	88.9	88.5	88.5	0.0 pps
Older (55-64)	57.1	60.3	63.3	61.4	57.2	-4.3 pps
Nationals (15-64)	71.2	72.8	73.8	73.6	73.1	-0.5 pps
Non-nationals (15-64)	83.6	69.9	77.8	75.7	74.0	-1.7 pps
Male	76.2	77.6	78.6	77.0	75.8	-1.2 pps
Young (15-24)	47.8	48.9	48.8	46.8	43.0	-3.8 pps
Prime age (25-54)	90.0	91.0	92.2	91.1	91.3	0.2 pps
Older (55-64)	64.4	67.9	68.8	63.8	58.9	-4.9 pps
Female	66.7	68.3	70.5	71.0	70.7	-0.3 pps
Young (15-24)	33.7	36.8	36.7	36.3	37.7	1.4 pps
Prime age (25-54)	82.9	83.6	85.7	86.1	85.9	-0.2 pps
Older (55-64)	51.6	54.6	59.3	59.7	55.8	-3.9 pps
5 - Employment rate (% of population 15-64)	66.3	68.3	68.7	61.0	59.3	-1.6 pps
Young (15-24)	35.9	38.3	37.2	27.7	26.4	-1.2 pps
Prime age (25-54)	81.1	82.3	82.6	74.7	73.4	-1.3 pps
Older (55-64)	53.3	57.7	59.4	53.2	48.2	-5.0 pps
Low-skilled (15-64)	32.1	36.1	34.3	25.8	23.3	-2.5 pps
Medium-skilled (15-64)	72.2	72.0	70.9	62.3	60.9	-1.4 pps
High-skilled (15-64)	101.0	99.9	105.5	100.1	95.0	-5.1 pps
Nationals (15-64)	65.7	67.4	58.1	51.7	50.6	-1.1 pps
Non-nationals (15-64)	0.6	0.9	10.5	9.3	8.7	-0.6 pps
Male	70.4	72.5	72.1	61.0	59.2	-1.8 pps
Young (15-24)	42.8	43.4	42.4	29.3	27.8	-1.5 pps
Prime age (25-54)	83.7	85.6	85.4	74.5	72.9	-1.6 pps
Older (55-64)	59.5	64.6	63.1	53.2	47.6	-5.6 pps
Female	62.4	64.4	65.4	60.9	59.4	-1.4 pps
Young (15-24)	28.7	33.1	31.9	26.0	25.0	-0.9 pps
Prime age (25-54)	78.6	79.1	79.9	74.9	73.8	-1.1 pps
Older (55-64)	48.7	52.4	56.7	53.3	48.7	-4.7 pps
6 - Employed persons (15-64, 1000 pers.)	1047.3	1075.1	1076.3	950.9	918.9	-3.4 %
7 - Employment growth (% , National accounts)	4.9	3.6	0.9	-13.2	-4.8	8.4 pps
Employment growth (% , 15-64, LFS)	:	:	:	:	:	: pps
Male	:	:	:	:	:	: pps
Female	:	:	:	:	:	: pps
8 - Self employed (% of total employment)	9.7	8.8	8.5	9.7	9.9	0.2 pps
Male	5.9	5.8	5.7	6.1	5.9	-0.3 pps
Female	3.8	3.0	2.9	3.5	4.0	0.5 pps
9 - Temporary employment (% of total employment)	7.2	4.2	3.3	4.4	6.8	2.4 pps
Male	8.9	5.6	4.6	5.9	8.9	3.0 pps
Female	5.4	2.8	1.9	3.0	5.0	2.0 pps
10 - Part-time (% of total employment)	5.8	5.6	5.5	8.4	9.3	0.9 pps
Male	4.3	4.4	3.9	7.0	7.5	0.5 pps
Female	7.4	6.9	7.1	9.6	11.0	1.4 pps
11 - Unemployment rate (harmonised:15-74)	6.8	6.0	7.5	17.1	18.7	1.6 pps
Young (15-24)	12.2	10.7	13.1	33.6	34.5	0.9 pps
Prime age (25-49)	6.1	5.6	7.2	15.8	17.0	1.2 pps
Older (55-64)	6.6	4.4	6.2	13.4	15.6	2.2 pps
Low-skilled (15-64)	14.9	10.8	14.6	31.4	32.3	0.9 pps
Medium-skilled (15-64)	6.3	5.9	7.7	18.7	20.4	1.7 pps
High-skilled (15-64)	3.8	3.7	4.2	8.4	10.5	2.1 pps
Nationals (15-64)	7.0	6.2	7.1	16.4	17.6	1.2 pps
Non-nationals (15-64)	:	:	11.1	23.5	26.1	2.6 pps
Male	7.4	6.4	8.0	20.3	21.7	1.4 pps
Female	6.2	5.6	6.9	13.9	15.7	1.8 pps
12 - Long-term unemployment rate (% of total unemployment)	36.6	26.3	25.7	26.7	45.1	18.4 pps
13 - Worked hours (average actual weekly hours)	42.6	41.8	40.7	40.6	40.2	-1.0 %
Male	43.8	42.6	41.3	41.1	40.6	-1.2 %
Female	41.4	40.8	40.0	40.0	39.8	-0.5 %
14 - Sectoral employment growth (% change)						
Agriculture	3.2	-9.8	-18.3	-3.1	0.1	3.2 pps
Building and construction	12.9	23.1	0.2	-38.6	-18.8	19.8 pps
Services	5.1	4.6	4.7	-8.9	-5.1	3.7 pps
Manufacturing industry	1.9	-1.7	-2.1	-18.7	2.0	20.7 pps
15 - Indicator board on wage developments (% change)						
Compensation per employee	23.2	35.1	15.7	-12.2	-6.5	5.7 pps
Real compensation per employee based on GDP	12.2	12.3	1.2	-10.8	-4.3	6.6 pps
Hourly labour costs (Eurostat labour cost index)	23.4	30.3	22.4	0.2	-2.9	-3.1 pps
Wage and salaries	29.4	43.3	19.4	-26.1	:	: pps
Labour productivity (GDP/person employed)	7.0	6.2	-5.1	-5.5	4.6	10.1 pps

Lithuania		2006	2007	2008	2009	2010	2009-2010
1	- Population (total, 1000 pers.)	3403	3385	3366	3350	3311	-1.2 %
2	- Population (working age:15-64, 1000 pers.)	2321	2319	2316	2309	2283	-1.1 %
	(% of total population)	68.2	68.5	68.8	68.9	68.9	0.0 pps
3	- Labour force (15-64, 1000 pers.)	1565	1575	1584	1612	1610	-0.1 %
	Male	790	796	801	805	800	-0.6 %
	Female	775	779	783	807	810	0.4 %
4	- Activity rate (% of population 15-64)	67.4	67.9	68.4	69.8	70.5	0.7 pps
	Young (15-24)	26.3	27.4	30.8	30.4	29.6	-0.7 pps
	Prime age (25-54)	86.2	86.0	85.5	87.3	88.5	1.2 pps
	Older (55-64)	52.9	55.6	55.6	57.6	56.8	-0.8 pps
	Nationals (15-64)	67.4	67.9	68.3	69.8	70.5	0.7 pps
	Non-nationals (15-64)	71.6	69.3	76.1	63.8	72.0	8.2 pps
	Male	70.5	71.0	71.4	72.0	72.4	0.4 pps
	Young (15-24)	29.3	31.8	35.4	33.8	32.8	-1.0 pps
	Prime age (25-54)	88.7	87.9	87.4	88.3	89.2	0.9 pps
	Older (55-64)	59.9	63.4	63.0	63.9	62.9	-0.9 pps
	Female	64.6	65.0	65.5	67.8	68.8	1.0 pps
	Young (15-24)	23.1	22.8	26.0	26.7	26.3	-0.4 pps
	Prime age (25-54)	83.8	84.2	83.8	86.3	87.9	1.5 pps
	Older (55-64)	47.6	49.7	50.0	52.9	52.2	-0.7 pps
5	- Employment rate (% of population 15-64)	63.6	64.9	64.3	60.1	57.8	-2.3 pps
	Young (15-24)	23.7	25.2	26.7	21.5	19.2	-2.2 pps
	Prime age (25-54)	81.7	82.5	81.2	76.3	73.8	-2.5 pps
	Older (55-64)	49.6	53.4	53.1	51.6	48.6	-3.0 pps
	Low-skilled (15-64)	22.0	23.3	18.2	15.5	12.2	-3.4 pps
	Medium-skilled (15-64)	68.5	67.4	66.9	60.7	56.5	-4.2 pps
	High-skilled (15-64)	101.0	104.1	100.6	97.5	94.1	-3.4 pps
	Nationals (15-64)	63.1	64.4	64.0	59.8	57.5	-2.4 pps
	Non-nationals (15-64)	0.4	0.5	0.4	0.3	0.4	0.1 pps
	Male	66.3	67.9	67.1	59.5	56.8	-2.7 pps
	Young (15-24)	26.4	29.6	30.9	22.0	20.2	-1.8 pps
	Prime age (25-54)	84.1	84.3	82.7	74.6	71.4	-3.2 pps
	Older (55-64)	55.7	60.8	60.2	56.0	52.3	-3.7 pps
	Female	61.0	62.1	61.8	60.7	58.7	-1.9 pps
	Young (15-24)	20.9	20.5	22.2	20.9	18.2	-2.7 pps
	Prime age (25-54)	79.5	80.8	79.7	78.0	76.1	-1.9 pps
	Older (55-64)	45.1	47.9	47.7	48.3	45.8	-2.5 pps
6	- Employed persons (15-64, 1000 pers.)	1475.9	1505.8	1490.2	1387.5	1319.6	-4.9 %
7	- Employment growth (% , National accounts)	1.8	2.8	-0.7	-6.8	-5.1	1.7 pps
	Employment growth (% , 15-64, LFS)	:	:	:	:	:	pps
	Male	:	:	:	:	:	pps
	Female	:	:	:	:	:	pps
8	- Self employed (% of total employment)	13.1	11.7	10.0	10.2	9.1	-1.1 pps
	Male	8.1	7.5	6.6	6.4	5.4	-1.0 pps
	Female	5.1	4.2	3.4	3.8	3.7	-0.1 pps
9	- Temporary employment (% of total employment)	4.5	3.5	2.4	2.3	2.4	0.1 pps
	Male	6.4	4.8	2.9	3.0	3.3	0.3 pps
	Female	2.6	2.3	1.9	1.6	1.7	0.1 pps
10	- Part-time (% of total employment)	9.5	8.1	6.5	8.0	7.7	-0.3 pps
	Male	7.5	6.5	4.7	6.7	6.3	-0.4 pps
	Female	11.5	9.7	8.3	9.1	8.9	-0.2 pps
11	- Unemployment rate (harmonised:15-74)	5.6	4.3	5.8	13.7	17.8	4.1 pps
	Young (15-24)	9.8	8.2	13.4	29.2	35.1	5.9 pps
	Prime age (25-49)	4.8	4.0	4.9	12.5	16.8	4.3 pps
	Older (55-64)	6.2	3.8	4.4	10.4	14.5	4.1 pps
	Low-skilled (15-64)	10.6	7.7	13.7	30.9	41.1	10.2 pps
	Medium-skilled (15-64)	6.5	5.1	6.7	16.4	21.9	5.5 pps
	High-skilled (15-64)	2.6	2.1	3.0	6.1	7.8	1.7 pps
	Nationals (15-64)	5.7	4.3	5.9	13.9	18.0	4.1 pps
	Non-nationals (15-64)	:	:	:	:	:	pps
	Male	5.8	4.3	6.1	17.1	21.2	4.1 pps
	Female	5.4	4.3	5.6	10.4	14.5	4.1 pps
12	- Long-term unemployment rate (% of total unemployment)	44.2	32.0	21.1	23.2	41.4	18.2 pps
13	- Worked hours (average actual weekly hours)	39.8	40.0	40.3	39.9	39.8	-0.3 %
	Male	40.4	40.6	40.9	40.5	40.4	-0.2 %
	Female	39.0	39.3	39.7	39.4	39.3	-0.3 %
14	- Sectoral employment growth (% change)						
	Agriculture	-9.9	-14.2	-23.9	9.4	-6.8	-16.2 pps
	Building and construction	12.7	15.9	-2.4	-24.4	-23.2	1.2 pps
	Services	3.6	4.6	3.6	-4.1	-1.4	2.7 pps
	Manufacturing industry	-0.6	1.7	-0.3	-12.2	-8.2	4.0 pps
15	- Indicator board on wage developments (% change)						
	Compensation per employee	16.7	13.9	14.3	-11.1	-1.3	9.8 pps
	Real compensation per employee based on GDP	9.5	4.9	4.2	-7.7	-3.3	4.4 pps
	Hourly labour costs (Eurostat labour cost index)	18.5	21.8	17.6	-6.5	-4.9	1.6 pps
	Wage and salaries	20.4	18.8	15.8	-18.1	:	pps
	Labour productivity (GDP/person employed)	5.9	6.9	3.6	-8.5	6.8	15.3 pps

Luxembourg	2006	2007	2008	2009	2010	2009-2010
1 - Population (total, 1000 pers.)	456	465	467	481	488	1.5 %
2 - Population (working age:15-64, 1000 pers.)	307	316	318	330	335	1.7 %
(% of total population)	67.2	68.0	68.1	68.5	68.6	0.2 pps
3 - Labour force (15-64, 1000 pers.)	205	211	213	227	229	1.0 %
<i>Male</i>	115	118	120	128	128	0.4 %
<i>Female</i>	90	94	92	99	100	1.6 %
4 - Activity rate (% of population 15-64)	66.7	66.9	66.8	68.7	68.2	-0.5 pps
Young (15-24)	27.8	26.6	29.1	32.3	24.7	-7.6 pps
Prime age (25-54)	84.5	84.8	83.4	84.8	85.7	0.9 pps
Older (55-64)	33.7	32.6	35.1	39.3	40.5	1.2 pps
Nationals (15-64)	62.8	62.7	62.7	64.8	64.3	-0.5 pps
Non-nationals (15-64)	72.0	72.1	71.9	73.3	72.8	-0.4 pps
<i>Male</i>	75.3	75.0	74.7	76.5	76.0	-0.6 pps
Young (15-24)	30.5	30.7	30.8	34.8	26.7	-8.2 pps
Prime age (25-54)	95.3	94.9	93.8	94.1	94.8	0.7 pps
Older (55-64)	38.8	36.3	39.6	47.7	48.9	1.2 pps
<i>Female</i>	58.2	58.9	58.7	60.7	60.3	-0.4 pps
Young (15-24)	25.2	22.4	27.0	29.2	22.5	-6.8 pps
Prime age (25-54)	73.8	74.7	72.9	75.3	76.3	1.0 pps
Older (55-64)	28.3	29.2	30.4	30.8	32.2	1.4 pps
5 - Employment rate (% of population 15-64)	63.5	64.2	63.4	65.2	65.2	0.0 pps
Young (15-24)	23.2	22.5	23.9	26.7	21.2	-5.5 pps
Prime age (25-54)	81.0	81.9	80.0	81.2	82.3	1.1 pps
Older (55-64)	33.1	32.0	34.1	38.1	39.6	1.5 pps
Low-skilled (15-64)	44.7	50.1	48.3	34.4	33.3	-1.1 pps
Medium-skilled (15-64)	63.7	70.2	70.7	70.9	71.9	1.0 pps
High-skilled (15-64)	140.8	95.7	90.5	129.4	114.2	-15.1 pps
Nationals (15-64)	35.1	33.7	33.5	33.6	33.7	0.0 pps
Non-nationals (15-64)	28.4	30.4	29.9	31.5	31.5	0.0 pps
<i>Male</i>	72.7	72.3	71.5	73.2	73.1	-0.1 pps
Young (15-24)	25.6	26.7	27.1	29.0	22.1	-6.9 pps
Prime age (25-54)	92.7	92.2	90.2	90.8	92.0	1.2 pps
Older (55-64)	38.8	35.4	38.8	46.6	47.8	1.2 pps
<i>Female</i>	54.6	56.1	55.2	57.0	57.2	0.2 pps
Young (15-24)	21.4	18.3	20.6	24.2	20.4	-3.8 pps
Prime age (25-54)	69.4	71.7	69.5	71.4	72.5	1.1 pps
Older (55-64)	27.9	28.8	29.5	29.6	31.4	1.8 pps
6 - Employed persons (15-64, 1000 pers.)	194.9	202.6	201.8	214.8	218.6	1.8 %
7 - Employment growth (% , National accounts)	3.6	4.5	4.7	0.9	1.6	0.7 pps
Employment growth (% , 15-64, LFS)	:	:	:	:	:	: pps
<i>Male</i>	:	:	:	:	:	: pps
<i>Female</i>	:	:	:	:	:	: pps
8 - Self employed (% of total employment)	7.6	7.0	6.1	7.4	7.2	-0.2 pps
<i>Male</i>	5.0	4.5	3.7	5.0	4.7	-0.3 pps
<i>Female</i>	2.6	2.5	2.4	2.4	2.5	0.0 pps
9 - Temporary employment (% of total employment)	6.1	6.8	6.2	7.2	7.1	-0.1 pps
<i>Male</i>	5.7	6.2	5.9	6.3	6.2	-0.1 pps
<i>Female</i>	6.6	7.6	6.6	8.3	8.3	0.0 pps
10 - Part-time (% of total employment)	17.1	17.8	17.9	17.6	17.5	-0.1 pps
<i>Male</i>	2.6	2.6	2.7	4.5	3.4	-1.1 pps
<i>Female</i>	36.2	37.1	38.2	34.9	35.8	0.9 pps
11 - Unemployment rate (harmonised:15-74)	4.6	4.2	4.9	5.1	4.5	-0.6 pps
Young (15-24)	16.2	15.2	17.9	17.2	14.2	-3.0 pps
Prime age (25-49)	4.3	3.4	4.3	4.5	4.0	-0.5 pps
Older (55-64)	:	:	:	:	:	: pps
Low-skilled (15-64)	6.6	5.8	6.6	8.2	6.1	-2.1 pps
Medium-skilled (15-64)	4.4	3.4	5.9	4.3	4.0	-0.3 pps
High-skilled (15-64)	3.1	3.2	2.4	4.2	3.8	-0.4 pps
Nationals (15-64)	3.1	3.3	3.0	3.0	2.8	-0.2 pps
Non-nationals (15-64)	6.7	4.9	7.3	7.3	6.1	-1.2 pps
<i>Male</i>	3.6	3.4	4.1	4.5	3.9	-0.6 pps
<i>Female</i>	6.0	5.1	5.9	5.9	5.3	-0.6 pps
12 - Long-term unemployment rate (% of total unemployment)	29.5	28.7	32.2	23.2	29.3	6.1 pps
13 - Worked hours (average actual weekly hours)	40.8	40.8	40.4	41.4	41.4	0.0 %
<i>Male</i>	41.3	41.2	40.9	42.4	42.2	-0.5 %
<i>Female</i>	39.8	40.0	39.3	39.3	39.6	0.8 %
14 - Sectoral employment growth (% change)						
Agriculture	0.0	6.1	-3.8	-2.0	6.1	8.1 pps
Building and construction	4.7	5.1	3.8	-0.3	0.8	1.1 pps
Services	4.0	5.1	5.6	1.7	2.0	0.3 pps
Manufacturing industry	0.0	-1.1	1.7	-2.8	-1.2	1.6 pps
15 - Indicator board on wage developments (% change)						
Compensation per employee	2.6	3.7	2.1	1.8	1.6	-0.3 pps
Real compensation per employee based on GDP	-3.9	0.1	-2.1	2.2	-3.8	-5.9 pps
Hourly labour costs (Eurostat labour cost index)	2.6	3.3	3.3	4.1	2.4	-1.7 pps
Wage and salaries	7.6	8.9	6.9	1.8	:	: pps
Labour productivity (GDP/person employed)	1.4	2.1	-3.2	-4.5	1.9	6.4 pps

Hungary		2006	2007	2008	2009	2010	2009-2010
1	- Population (total, 1000 pers.)	9921	9907	9893	9867	9852	-0.2 %
2	- Population (working age:15-64, 1000 pers.)	6816	6800	6794	6771	6769	0.0 %
	(% of total population)	68.7	68.6	68.7	68.6	68.7	0.1 pps
3	- Labour force (15-64, 1000 pers.)	4222	4209	4178	4172	4225	1.3 %
	Male	2286	2290	2267	2260	2270	0.4 %
	Female	1936	1919	1911	1912	1955	2.3 %
4	- Activity rate (% of population 15-64)	62.0	61.9	61.5	61.6	62.4	0.8 pps
	Young (15-24)	26.8	25.6	25.0	24.6	24.9	0.3 pps
	Prime age (25-54)	79.6	80.0	80.1	80.2	80.9	0.7 pps
	Older (55-64)	34.9	34.5	33.1	35.0	37.3	2.3 pps
	Nationals (15-64)	61.9	61.9	61.4	61.5	62.4	0.9 pps
	Non-nationals (15-64)	66.8	68.0	70.4	73.8	67.8	-6.0 pps
	Male	68.7	69.0	68.3	68.2	68.3	0.2 pps
	Young (15-24)	30.1	29.3	28.6	27.7	27.7	0.0 pps
	Prime age (25-54)	86.5	86.9	87.0	86.9	87.2	0.4 pps
	Older (55-64)	43.1	43.6	40.5	42.6	43.1	0.5 pps
	Female	55.5	55.1	55.0	55.3	56.7	1.4 pps
	Young (15-24)	23.4	21.8	21.3	21.5	22.1	0.6 pps
	Prime age (25-54)	72.9	73.2	73.3	73.6	74.6	1.1 pps
	Older (55-64)	28.2	27.3	27.0	28.8	32.4	3.7 pps
5	- Employment rate (% of population 15-64)	57.3	57.3	56.7	55.4	55.4	0.0 pps
	Young (15-24)	21.7	21.0	20.0	18.1	18.3	0.2 pps
	Prime age (25-54)	74.2	74.6	74.4	72.9	72.5	-0.4 pps
	Older (55-64)	33.6	33.1	31.4	32.8	34.4	1.6 pps
	Low-skilled (15-64)	24.7	24.0	24.5	23.4	23.9	0.5 pps
	Medium-skilled (15-64)	65.9	67.0	64.1	61.5	60.9	-0.7 pps
	High-skilled (15-64)	94.7	86.8	89.3	87.3	86.7	-0.6 pps
	Nationals (15-64)	56.9	56.9	56.2	54.9	55.0	0.1 pps
	Non-nationals (15-64)	0.4	0.4	0.5	0.5	0.4	-0.1 pps
	Male	63.8	64.0	63.0	61.1	60.4	-0.7 pps
	Young (15-24)	24.5	24.2	23.1	19.9	20.0	0.1 pps
	Prime age (25-54)	81.0	81.3	81.0	78.9	77.9	-0.9 pps
	Older (55-64)	41.4	41.7	38.5	39.9	39.6	-0.3 pps
	Female	51.1	50.9	50.6	49.9	50.6	0.7 pps
	Young (15-24)	18.8	17.8	16.9	16.3	16.6	0.3 pps
	Prime age (25-54)	67.6	67.9	67.9	66.9	67.1	0.2 pps
	Older (55-64)	27.1	26.2	25.7	27.0	30.1	3.1 pps
6	- Employed persons (15-64, 1000 pers.)	3906.0	3897.0	3849.2	3751.2	3750.1	0.0 %
7	- Employment growth (% , National accounts)	0.6	-0.3	-1.3	-2.8	0.2	3.0 pps
	Employment growth (% , 15-64, LFS)	:	:	:	:	:	pps
	Male	:	:	:	:	:	pps
	Female	:	:	:	:	:	pps
8	- Self employed (% of total employment)	12.1	11.8	11.6	11.9	11.7	-0.1 pps
	Male	8.3	8.0	8.0	8.0	7.9	-0.1 pps
	Female	3.7	3.8	3.6	3.9	3.8	0.0 pps
9	- Temporary employment (% of total employment)	6.7	7.3	7.8	8.4	9.6	1.2 pps
	Male	7.3	7.7	8.6	9.0	10.0	1.0 pps
	Female	6.0	6.8	7.0	7.8	9.2	1.4 pps
10	- Part-time (% of total employment)	3.8	3.9	4.3	5.2	5.5	0.3 pps
	Male	2.4	2.5	3.0	3.6	3.6	0.0 pps
	Female	5.4	5.5	5.8	7.1	7.6	0.5 pps
11	- Unemployment rate (harmonised:15-74)	7.5	7.4	7.8	10.0	11.2	1.2 pps
	Young (15-24)	19.1	18.0	19.9	26.5	26.6	0.1 pps
	Prime age (25-49)	7.1	7.0	7.3	9.4	10.7	1.3 pps
	Older (55-64)	3.9	4.2	5.0	6.3	7.8	1.5 pps
	Low-skilled (15-64)	16.7	17.5	18.9	23.4	25.3	1.9 pps
	Medium-skilled (15-64)	6.9	6.6	7.2	9.4	10.6	1.2 pps
	High-skilled (15-64)	2.8	2.9	2.8	4.0	4.7	0.7 pps
	Nationals (15-64)	7.5	7.4	7.9	10.1	11.3	1.2 pps
	Non-nationals (15-64)	:	:	:	11.2	8.4	-2.8 pps
	Male	7.2	7.1	7.6	10.3	11.6	1.3 pps
	Female	7.8	7.7	8.1	9.7	10.7	1.0 pps
12	- Long-term unemployment rate (% of total unemployment)	45.1	46.8	46.5	41.6	49.3	7.7 pps
13	- Worked hours (average actual weekly hours)	40.9	40.7	40.7	40.5	40.5	0.0 %
	Male	41.8	41.5	41.5	41.1	41.1	0.0 %
	Female	39.8	39.6	39.8	39.8	39.8	0.0 %
14	- Sectoral employment growth (% change)						
	Agriculture	-2.4	-6.2	-5.7	-4.9	-1.4	3.5 pps
	Building and construction	1.5	2.8	-6.3	-1.6	-3.8	-2.2 pps
	Services	1.1	-0.2	0.0	-0.9	1.4	2.3 pps
	Manufacturing industry	-0.2	0.9	-0.1	-8.6	-1.3	7.3 pps
15	- Indicator board on wage developments (% change)						
	Compensation per employee	5.3	6.7	7.0	-2.2	-0.1	2.0 pps
	Real compensation per employee based on GDP	1.1	0.8	2.1	-6.3	-2.9	3.3 pps
	Hourly labour costs (Eurostat labour cost index)	8.9	9.7	7.9	2.3	-1.2	-3.5 pps
	Wage and salaries	7.0	6.8	5.6	-3.5	:	pps
	Labour productivity (GDP/person employed)	3.0	1.1	2.1	-4.0	1.0	5.0 pps

Malta	2006	2007	2008	2009	2010	2009-2010
1 - Population (total, 1000 pers.)	406	409	411	414	415	0.1 %
2 - Population (working age:15-64, 1000 pers.)	281	285	288	292	290	-0.8 %
(% of total population)	69.2	69.7	70.1	70.5	69.8	-0.6 pps
3 - Labour force (15-64, 1000 pers.)	162	166	169	172	175	1.3 %
Male	111	112	113	114	115	0.4 %
Female	51	54	57	58	60	3.4 %
4 - Activity rate (% of population 15-64)	57.6	58.4	58.8	59.0	60.2	1.2 pps
Young (15-24)	52.5	53.1	52.2	51.4	51.5	0.1 pps
Prime age (25-54)	67.9	69.7	70.8	71.8	73.1	1.2 pps
Older (55-64)	30.6	29.5	30.5	29.7	31.7	2.0 pps
Nationals (15-64)	57.7	58.5	58.9	58.9	60.1	1.2 pps
Non-nationals (15-64)	54.2	57.5	56.1	61.1	63.4	2.4 pps
Male	78.1	77.6	76.9	76.6	77.6	1.0 pps
Young (15-24)	56.7	56.9	55.2	55.0	55.3	0.4 pps
Prime age (25-54)	93.9	94.2	93.6	93.7	94.3	0.6 pps
Older (55-64)	50.8	47.5	47.9	47.5	50.2	2.7 pps
Female	36.5	38.6	40.2	40.6	42.2	1.6 pps
Young (15-24)	48.1	48.9	49.1	47.5	47.3	-0.2 pps
Prime age (25-54)	40.8	44.0	46.8	48.8	50.8	2.0 pps
Older (55-64)	11.0	12.4	13.1	11.8	13.2	1.5 pps
5 - Employment rate (% of population 15-64)	53.6	54.6	55.3	54.8	56.1	1.2 pps
Young (15-24)	44.2	45.7	45.8	44.0	44.7	0.7 pps
Prime age (25-54)	64.4	66.2	67.4	68.0	68.7	0.8 pps
Older (55-64)	29.9	28.4	29.1	27.8	30.2	2.3 pps
Low-skilled (15-64)	43.5	46.0	47.8	46.8	47.2	0.4 pps
Medium-skilled (15-64)	90.6	80.1	73.9	76.9	76.2	-0.7 pps
High-skilled (15-64)	112.3	103.7	102.5	93.6	89.8	-3.8 pps
Nationals (15-64)	52.2	53.2	53.8	53.1	54.2	1.0 pps
Non-nationals (15-64)	1.5	1.4	1.5	1.7	1.9	0.1 pps
Male	73.3	73.0	72.6	71.5	72.2	0.7 pps
Young (15-24)	47.0	48.2	47.8	46.4	47.7	1.3 pps
Prime age (25-54)	89.7	89.9	89.5	89.0	88.7	-0.3 pps
Older (55-64)	49.2	46.0	46.5	45.2	47.8	2.6 pps
Female	33.4	35.7	37.4	37.5	39.2	1.7 pps
Young (15-24)	41.3	43.3	44.1	41.4	41.5	0.1 pps
Prime age (25-54)	38.1	41.2	44.0	45.8	47.7	1.9 pps
Older (55-64)	10.7	11.7	12.5	11.1	12.9	1.8 pps
6 - Employed persons (15-64, 1000 pers.)	150.7	155.5	159.1	160.1	162.4	1.4 %
7 - Employment growth (% , National accounts)	1.3	3.2	2.6	-0.3	2.0	2.3 pps
Employment growth (% , 15-64, LFS)	:	:	:	:	:	pps
Male	:	:	:	:	:	pps
Female	:	:	:	:	:	pps
8 - Self employed (% of total employment)	13.7	13.8	13.1	13.4	13.7	0.4 pps
Male	11.9	11.5	11.1	11.2	11.8	0.6 pps
Female	1.8	2.3	2.0	2.1	2.0	-0.2 pps
9 - Temporary employment (% of total employment)	3.7	5.1	4.2	4.8	5.6	0.8 pps
Male	2.6	3.7	3.3	3.6	4.5	0.9 pps
Female	5.8	7.7	5.8	6.8	7.3	0.5 pps
10 - Part-time (% of total employment)	9.7	10.6	11.1	10.7	11.6	0.9 pps
Male	4.5	4.0	4.0	4.4	4.9	0.5 pps
Female	21.4	24.6	25.3	23.2	24.5	1.3 pps
11 - Unemployment rate (harmonised:15-74)	7.1	6.4	5.9	7.0	6.9	-0.1 pps
Young (15-24)	15.9	13.9	12.2	14.4	13.0	-1.4 pps
Prime age (25-49)	5.0	5.2	5.1	5.6	6.0	0.4 pps
Older (55-64)	:	:	:	:	:	pps
Low-skilled (15-64)	9.0	8.6	8.4	9.1	9.1	0.0 pps
Medium-skilled (15-64)	:	:	:	4.7	5.2	0.5 pps
High-skilled (15-64)	:	:	:	:	:	pps
Nationals (15-64)	6.9	6.4	6.1	6.8	6.9	0.1 pps
Non-nationals (15-64)	:	:	:	:	:	pps
Male	6.3	5.9	5.6	6.6	6.7	0.1 pps
Female	8.7	7.6	6.6	7.7	7.2	-0.5 pps
12 - Long-term unemployment rate (% of total unemployment)	40.6	41.9	42.2	43.6	46.1	2.5 pps
13 - Worked hours (average actual weekly hours)	40.6	41.0	41.2	41.0	40.6	-1.0 %
Male	41.3	41.9	42.0	41.8	41.4	-1.0 %
Female	38.7	38.6	39.1	38.9	38.5	-1.0 %
14 - Sectoral employment growth (% change)						
Agriculture	0.4	2.2	1.7	0.8	1.8	1.0 pps
Building and construction	8.1	3.2	0.5	-3.1	1.9	5.0 pps
Services	2.1	4.1	4.5	1.5	2.0	0.5 pps
Manufacturing industry	-3.0	-0.1	-4.3	-7.5	2.0	9.5 pps
15 - Indicator board on wage developments (% change)						
Compensation per employee	4.1	1.3	4.5	2.6	-1.1	-3.7 pps
Real compensation per employee based on GDP	1.0	-1.8	1.8	0.1	-3.9	-4.0 pps
Hourly labour costs (Eurostat labour cost index)	3.5	1.1	1.4	1.4	1.0	-0.4 pps
Wage and salaries	5.6	4.7	7.5	1.8	0.7	-1.1 pps
Labour productivity (GDP/person employed)	0.6	1.4	2.7	-3.1	1.1	4.2 pps

Netherlands		2006	2007	2008	2009	2010	2009-2010
1	- Population (total, 1000 pers.)	16142	16180	16190	16223	16350	0.8 %
2	- Population (working age:15-64, 1000 pers.)	10964	10986	10970	10970	11017	0.4 %
	(% of total population)	67.9	67.9	67.8	67.6	67.4	-0.2 pps
3	- Labour force (15-64, 1000 pers.)	8484	8622	8704	8742	8614	-1.5 %
	Male	4636	4680	4705	4700	4632	-1.5 %
	Female	3848	3942	3999	4042	3982	-1.5 %
4	- Activity rate (% of population 15-64)	77.4	78.5	79.3	79.7	78.2	-1.5 pps
	Young (15-24)	70.8	72.7	73.2	72.8	69.0	-3.8 pps
	Prime age (25-54)	87.1	87.6	88.5	88.8	87.9	-0.9 pps
	Older (55-64)	49.6	52.8	54.7	56.8	55.9	-0.9 pps
	Nationals (15-64)	78.0	79.1	79.8	80.2	78.7	-1.5 pps
	Non-nationals (15-64)	63.7	65.1	68.8	68.4	67.0	-1.3 pps
	Male	83.9	84.6	85.3	85.3	83.7	-1.6 pps
	Young (15-24)	71.5	73.1	73.7	72.7	68.6	-4.1 pps
	Prime age (25-54)	94.1	94.0	94.5	94.4	93.3	-1.1 pps
	Older (55-64)	60.4	64.0	65.9	67.6	67.3	-0.2 pps
	Female	70.7	72.2	73.3	74.1	72.6	-1.4 pps
	Young (15-24)	70.1	72.4	72.6	72.9	69.4	-3.4 pps
	Prime age (25-54)	80.1	81.2	82.5	83.0	82.4	-0.7 pps
	Older (55-64)	38.6	41.4	43.5	46.0	44.5	-1.5 pps
5	- Employment rate (% of population 15-64)	74.4	76.0	77.2	77.0	74.7	-2.3 pps
	Young (15-24)	66.2	68.4	69.3	68.0	63.0	-5.0 pps
	Prime age (25-54)	84.2	85.4	86.8	86.3	84.7	-1.7 pps
	Older (55-64)	47.7	50.9	53.0	55.1	53.7	-1.4 pps
	Low-skilled (15-64)	54.6	57.2	60.7	60.3	60.4	0.1 pps
	Medium-skilled (15-64)	79.0	82.0	80.5	79.0	76.6	-2.5 pps
	High-skilled (15-64)	96.2	92.2	93.8	95.2	90.5	-4.7 pps
	Nationals (15-64)	71.3	72.8	73.8	73.6	71.7	-1.9 pps
	Non-nationals (15-64)	2.5	2.6	2.8	2.7	2.5	-0.2 pps
	Male	80.9	82.2	83.2	82.4	80.0	-2.4 pps
	Young (15-24)	67.2	68.9	69.8	67.5	62.6	-5.0 pps
	Prime age (25-54)	91.4	92.1	93.0	92.0	90.0	-2.0 pps
	Older (55-64)	58.0	61.5	63.7	65.4	64.5	-0.9 pps
	Female	67.7	69.6	71.1	71.5	69.3	-2.2 pps
	Young (15-24)	65.1	67.9	68.8	68.4	63.5	-5.0 pps
	Prime age (25-54)	77.0	78.7	80.5	80.7	79.3	-1.4 pps
	Older (55-64)	37.2	40.1	42.2	44.7	42.8	-1.9 pps
6	- Employed persons (15-64, 1000 pers.)	8152.0	8345.1	8467.6	8443.4	8226.9	-2.6 %
7	- Employment growth (% , National accounts)	1.7	2.5	1.4	-1.1	-0.5	0.6 pps
	Employment growth (% , 15-64, LFS)	:	:	:	:	:	pps
	Male	:	:	:	:	:	pps
	Female	:	:	:	:	:	pps
8	- Self employed (% of total employment)	11.6	12.0	12.1	12.4	13.8	1.4 pps
	Male	7.7	8.0	8.0	8.1	9.2	1.1 pps
	Female	3.9	4.0	4.1	4.3	4.6	0.3 pps
9	- Temporary employment (% of total employment)	16.4	17.9	17.9	18.0	18.3	0.3 pps
	Male	15.2	16.4	16.2	16.0	16.9	0.9 pps
	Female	17.9	19.5	19.8	20.2	19.8	-0.4 pps
10	- Part-time (% of total employment)	45.8	46.3	46.8	47.7	48.3	0.6 pps
	Male	22.1	22.5	22.8	23.6	24.2	0.6 pps
	Female	74.5	74.8	75.2	75.7	76.2	0.5 pps
11	- Unemployment rate (harmonised:15-74)	4.4	3.6	3.1	3.7	4.5	0.8 pps
	Young (15-24)	6.6	5.9	5.3	6.6	8.7	2.1 pps
	Prime age (25-54)	3.3	2.5	2.0	2.8	3.7	0.9 pps
	Older (55-64)	3.8	3.6	3.2	3.1	4.0	0.9 pps
	Low-skilled (15-64)	6.1	5.3	4.6	5.5	7.4	1.9 pps
	Medium-skilled (15-64)	3.6	2.9	2.4	3.1	4.0	0.9 pps
	High-skilled (15-64)	2.3	1.8	1.6	2.1	2.8	0.7 pps
	Nationals (15-64)	3.7	3.1	2.6	3.2	4.3	1.1 pps
	Non-nationals (15-64)	8.8	6.5	6.2	7.0	9.5	2.5 pps
	Male	3.9	3.1	2.8	3.7	4.4	0.7 pps
	Female	5.0	4.1	3.4	3.8	4.5	0.7 pps
12	- Long-term unemployment rate (% of total unemployment)	42.9	39.3	34.4	24.2	27.5	3.3 pps
13	- Worked hours (average actual weekly hours)	41.3	41.3	41.1	41.0	41.2	0.5 %
	Male	41.9	41.9	41.7	41.6	41.8	0.5 %
	Female	38.8	38.9	38.9	38.8	38.9	0.3 %
14	- Sectoral employment growth (% change)						
	Agriculture	-1.6	-1.1	-1.4	-4.5	3.1	7.6 pps
	Building and construction	1.9	1.2	1.9	-1.8	-2.4	-0.6 pps
	Services	2.1	3.1	1.6	-0.7	-0.2	0.6 pps
	Manufacturing industry	-0.3	0.5	0.9	-3.1	-3.1	0.0 pps
15	- Indicator board on wage developments (% change)						
	Compensation per employee	2.3	3.0	3.4	2.2	1.1	-1.1 pps
	Real compensation per employee based on GDP	0.7	1.6	1.2	2.4	-0.5	-2.9 pps
	Hourly labour costs (Eurostat labour cost index)	3.0	3.3	4.3	2.0	1.7	-0.3 pps
	Wage and salaries	4.3	6.1	4.8	1.1	:	pps
	Labour productivity (GDP/person employed)	1.7	1.3	0.4	-2.8	2.3	5.1 pps

Austria	2006	2007	2008	2009	2010	2009-2010
1 - Population (total, 1000 pers.)	8155	8191	8220	8238	8259	0.3 %
2 - Population (working age:15-64, 1000 pers.)	5532	5551	5576	5588	5606	0.3 %
(% of total population)	67.8	67.8	67.8	67.8	67.9	0.0 pps
3 - Labour force (15-64, 1000 pers.)	4077	4149	4182	4207	4209	0.1 %
<i>Male</i>	2215	2257	2259	2252	2256	0.2 %
<i>Female</i>	1862	1891	1923	1955	1953	-0.1 %
4 - Activity rate (% of population 15-64)	73.7	74.7	75.0	75.3	75.1	-0.2 pps
Young (15-24)	59.4	60.8	60.8	60.5	58.8	-1.7 pps
Prime age (25-54)	87.1	87.4	87.3	87.7	87.7	-0.1 pps
Older (55-64)	36.8	39.8	41.9	42.1	43.3	1.3 pps
Nationals (15-64)	74.1	75.3	75.7	75.9	75.8	-0.2 pps
Non-nationals (15-64)	70.4	70.5	69.5	70.3	70.1	-0.2 pps
<i>Male</i>	80.5	81.7	81.4	81.0	80.9	-0.1 pps
Young (15-24)	63.9	65.0	64.6	64.0	63.6	-0.4 pps
Prime age (25-54)	93.2	93.7	93.0	92.6	92.5	-0.1 pps
Older (55-64)	47.3	51.3	52.8	52.3	53.0	0.7 pps
<i>Female</i>	67.0	67.8	68.6	69.6	69.3	-0.3 pps
Young (15-24)	55.1	56.7	56.9	57.0	54.1	-2.9 pps
Prime age (25-54)	80.9	81.1	81.5	82.8	82.8	0.0 pps
Older (55-64)	26.9	28.9	31.6	32.4	34.2	1.8 pps
5 - Employment rate (% of population 15-64)	70.2	71.4	72.1	71.6	71.7	0.1 pps
Young (15-24)	54.0	55.5	55.9	54.5	53.6	-0.8 pps
Prime age (25-54)	83.5	84.0	84.4	84.0	84.2	0.2 pps
Older (55-64)	35.5	38.6	41.0	41.1	42.4	1.3 pps
Low-skilled (15-64)	47.5	53.7	51.9	47.3	45.7	-1.6 pps
Medium-skilled (15-64)	77.2	78.5	77.6	77.3	78.1	0.8 pps
High-skilled (15-64)	90.6	80.6	87.5	94.1	95.1	1.0 pps
Nationals (15-64)	63.2	64.0	64.5	64.2	63.9	-0.2 pps
Non-nationals (15-64)	6.9	7.4	7.6	7.5	7.8	0.3 pps
<i>Male</i>	76.9	78.4	78.5	76.9	77.1	0.3 pps
Young (15-24)	58.2	59.6	59.5	57.3	57.9	0.6 pps
Prime age (25-54)	89.9	90.6	90.2	88.5	88.7	0.2 pps
Older (55-64)	45.3	49.8	51.8	51.0	51.6	0.7 pps
<i>Female</i>	63.5	64.4	65.8	66.4	66.4	-0.1 pps
Young (15-24)	49.9	51.5	52.3	51.6	49.4	-2.3 pps
Prime age (25-54)	77.0	77.5	78.6	79.5	79.7	0.1 pps
Older (55-64)	26.3	28.0	30.8	31.7	33.7	2.0 pps
6 - Employed persons (15-64, 1000 pers.)	3881.3	3963.2	4019.8	4002.4	4021.1	0.5 %
7 - Employment growth (% , National accounts)	1.4	1.8	1.8	-0.9	1.0	1.9 pps
Employment growth (% , 15-64, LFS)	:	:	:	:	:	: pps
<i>Male</i>	:	:	:	:	:	: pps
<i>Female</i>	:	:	:	:	:	: pps
8 - Self employed (% of total employment)	11.7	11.7	11.1	10.9	11.3	0.3 pps
<i>Male</i>	7.6	7.5	7.2	7.1	7.3	0.2 pps
<i>Female</i>	4.1	4.1	3.9	3.8	4.0	0.2 pps
9 - Temporary employment (% of total employment)	9.0	8.9	9.0	9.1	9.3	0.2 pps
<i>Male</i>	9.1	8.8	8.9	9.1	9.8	0.7 pps
<i>Female</i>	8.9	9.0	9.1	9.0	8.9	-0.1 pps
10 - Part-time (% of total employment)	21.3	21.8	22.6	23.7	24.3	0.6 pps
<i>Male</i>	5.8	6.2	6.9	7.4	7.8	0.4 pps
<i>Female</i>	39.9	40.7	41.1	42.4	43.3	0.9 pps
11 - Unemployment rate (harmonised:15-74)	4.8	4.4	3.8	4.8	4.4	-0.4 pps
Young (15-24)	9.1	8.7	8.0	10.0	8.8	-1.2 pps
Prime age (25-49)	4.2	3.9	3.4	4.2	4.0	-0.2 pps
Older (55-64)	3.5	3.0	2.1	2.4	2.2	-0.2 pps
Low-skilled (15-64)	9.4	8.8	8.1	10.1	8.7	-1.4 pps
Medium-skilled (15-64)	4.1	3.7	3.3	4.2	4.0	-0.2 pps
High-skilled (15-64)	2.6	2.5	1.8	2.3	2.4	0.1 pps
Nationals (15-64)	4.1	3.8	3.4	4.2	3.9	-0.3 pps
Non-nationals (15-64)	10.6	9.6	7.8	10.4	8.7	-1.7 pps
<i>Male</i>	4.3	3.9	3.6	5.0	4.6	-0.4 pps
<i>Female</i>	5.2	5.0	4.1	4.6	4.2	-0.4 pps
12 - Long-term unemployment rate (% of total unemployment)	27.4	26.8	24.2	21.3	25.2	3.9 pps
13 - Worked hours (average actual weekly hours)	43.3	43.1	42.9	42.0	41.9	-0.2 %
<i>Male</i>	44.1	43.9	43.7	42.8	42.7	-0.2 %
<i>Female</i>	41.6	41.4	41.1	40.4	40.4	0.0 %
14 - Sectoral employment growth (% change)						
Agriculture	-2.4	-4.4	-1.5	-1.5	-0.5	1.0 pps
Building and construction	0.0	2.0	0.8	-1.2	0.1	1.3 pps
Services	1.7	2.2	2.1	0.2	1.7	1.6 pps
Manufacturing industry	2.2	2.3	1.8	-5.3	-1.9	3.4 pps
15 - Indicator board on wage developments (% change)						
Compensation per employee	3.0	3.1	3.2	1.8	1.6	-0.2 pps
Real compensation per employee based on GDP	1.6	0.9	1.4	1.5	0.1	-1.4 pps
Hourly labour costs (Eurostat labour cost index)	2.1	3.5	4.8	4.3	1.1	-3.2 pps
Wage and salaries	4.9	5.3	5.6	0.8	:	: pps
Labour productivity (GDP/person employed)	2.2	1.9	0.4	-3.0	1.1	4.1 pps

Poland		2006	2007	2008	2009	2010	2009-2010
1	- Population (total, 1000 pers.)	37446	37277	37158	37196	37368	0.5 %
2	- Population (working age:15-64, 1000 pers.)	26325	26299	26266	26338	26527	0.7 %
	(% of total population)	70.3	70.5	70.7	70.8	71.0	0.2 pps
3	- Labour force (15-64, 1000 pers.)	16679	16610	16765	17039	17414	2.2 %
	Male	9127	9086	9170	9310	9492	2.0 %
	Female	7552	7524	7595	7728	7922	2.5 %
4	- Activity rate (% of population 15-64)	63.4	63.2	63.8	64.7	65.6	1.0 pps
	Young (15-24)	34.2	33.0	33.1	33.8	34.5	0.7 pps
	Prime age (25-54)	81.7	81.7	82.5	83.4	84.1	0.8 pps
	Older (55-64)	30.7	31.8	33.3	34.5	36.7	2.2 pps
	Nationals (15-64)	63.4	63.2	63.8	64.7	65.6	1.0 pps
	Non-nationals (15-64)	56.0	69.7	71.4	72.6	68.2	-4.5 pps
	Male	70.1	70.0	70.9	71.8	72.4	0.7 pps
	Young (15-24)	37.5	36.5	36.5	38.1	39.1	1.0 pps
	Prime age (25-54)	88.2	87.9	88.8	89.4	89.7	0.3 pps
	Older (55-64)	42.6	44.8	46.8	47.5	48.9	1.4 pps
	Female	56.8	56.5	57.0	57.8	59.0	1.2 pps
	Young (15-24)	30.7	29.3	29.6	29.4	29.7	0.3 pps
	Prime age (25-54)	75.4	75.6	76.3	77.5	78.6	1.2 pps
	Older (55-64)	20.3	20.6	21.6	23.2	25.9	2.8 pps
5	- Employment rate (% of population 15-64)	54.5	57.0	59.2	59.3	59.3	-0.1 pps
	Young (15-24)	24.0	25.8	27.4	26.8	26.3	-0.5 pps
	Prime age (25-54)	71.8	74.9	77.5	77.6	77.1	-0.5 pps
	Older (55-64)	28.1	29.7	31.6	32.3	34.0	1.7 pps
	Low-skilled (15-64)	20.0	21.8	23.0	21.9	20.8	-1.1 pps
	Medium-skilled (15-64)	59.2	61.4	62.9	61.8	61.0	-0.7 pps
	High-skilled (15-64)	108.6	103.8	99.7	101.8	105.4	3.6 pps
	Nationals (15-64)	54.4	56.9	59.1	59.3	59.2	-0.1 pps
	Non-nationals (15-64)	0.1	0.1	0.1	0.1	0.1	0.0 pps
	Male	60.9	63.6	66.3	66.1	65.6	-0.5 pps
	Young (15-24)	26.9	29.2	31.0	30.4	30.3	0.0 pps
	Prime age (25-54)	78.3	81.1	84.0	83.7	82.6	-1.1 pps
	Older (55-64)	38.4	41.4	44.1	44.3	45.3	0.9 pps
	Female	48.2	50.6	52.4	52.8	53.0	0.3 pps
	Young (15-24)	21.0	22.4	23.7	23.2	22.1	-1.0 pps
	Prime age (25-54)	65.3	68.8	71.0	71.6	71.7	0.1 pps
	Older (55-64)	19.0	19.4	20.7	21.9	24.2	2.4 pps
6	- Employed persons (15-64, 1000 pers.)	14338.4	14996.5	15557.4	15629.5	15718.9	0.6 %
7	- Employment growth (% , National accounts)	3.2	4.4	3.8	0.3	0.4	0.1 pps
	Employment growth (% , 15-64, LFS)	:	:	:	:	:	: pps
	Male	:	:	:	:	:	: pps
	Female	:	:	:	:	:	: pps
8	- Self employed (% of total employment)	19.4	18.7	18.3	18.3	18.5	0.2 pps
	Male	12.7	12.3	12.0	12.0	12.1	0.1 pps
	Female	6.7	6.5	6.3	6.3	6.3	0.0 pps
9	- Temporary employment (% of total employment)	27.3	28.2	26.9	26.4	27.2	0.8 pps
	Male	28.4	28.4	26.2	26.2	27.3	1.1 pps
	Female	25.9	27.9	27.6	26.6	27.1	0.5 pps
10	- Part-time (% of total employment)	8.9	8.5	7.7	7.7	7.6	-0.1 pps
	Male	6.2	5.8	5.1	5.0	5.0	0.0 pps
	Female	12.2	11.7	10.9	10.9	10.8	-0.1 pps
11	- Unemployment rate (harmonised:15-74)	13.9	9.6	7.1	8.2	9.6	1.4 pps
	Young (15-24)	29.8	21.7	17.3	20.6	23.7	3.1 pps
	Prime age (25-54)	12.4	8.4	6.1	7.0	8.4	1.4 pps
	Older (55-64)	8.5	6.8	5.3	6.3	7.1	0.8 pps
	Low-skilled (15-64)	23.7	16.5	12.8	15.4	18.4	3.0 pps
	Medium-skilled (15-64)	15.0	10.3	7.6	8.8	10.6	1.8 pps
	High-skilled (15-64)	6.0	4.7	3.8	4.4	5.0	0.6 pps
	Nationals (15-64)	14.0	9.7	7.2	8.3	9.7	1.4 pps
	Non-nationals (15-64)	:	:	:	:	:	: pps
	Male	13.0	9.0	6.4	7.8	9.3	1.5 pps
	Female	14.9	10.4	8.0	8.7	10.0	1.3 pps
12	- Long-term unemployment rate (% of total unemployment)	56.2	51.4	33.5	30.3	31.1	0.8 pps
13	- Worked hours (average actual weekly hours)	42.3	42.2	41.8	41.4	41.3	-0.2 %
	Male	44.1	43.9	43.4	42.9	42.8	-0.2 %
	Female	39.9	39.9	39.7	39.4	39.3	-0.3 %
14	- Sectoral employment growth (% change)						
	Agriculture	-6.3	-2.4	-1.3	-4.1	-2.7	1.4 pps
	Building and construction	9.2	14.5	15.5	5.9	-2.4	-8.3 pps
	Services	5.0	5.0	3.6	2.7	2.9	0.1 pps
	Manufacturing industry	5.4	5.7	4.3	-4.9	-3.3	1.6 pps
15	- Indicator board on wage developments (% change)						
	Compensation per employee	1.8	4.9	8.9	3.5	8.4	4.9 pps
	Real compensation per employee based on GDP	0.3	0.9	5.7	-0.2	6.8	7.0 pps
	Hourly labour costs (Eurostat labour cost index)	5.7	10.6	10.1	5.2	1.2	-4.0 pps
	Wage and salaries	7.2	11.1	15.3	3.3	:	: pps
	Labour productivity (GDP/person employed)	2.9	2.3	1.3	1.3	3.4	2.1 pps

Portugal		2006	2007	2008	2009	2010	2009-2010
1	- Population (total, 1000 pers.)	10586	10604	10623	10638	10636	0.0 %
2	- Population (working age:15-64, 1000 pers.)	7116	7135	7145	7143	7114	-0.4 %
	(% of total population)	67.2	67.3	67.3	67.1	66.9	-0.3 pps
3	- Labour force (15-64, 1000 pers.)	5258	5285	5299	5263	5264	0.0 %
	<i>Male</i>	2796	2801	2811	2775	2755	-0.7 %
	<i>Female</i>	2462	2484	2488	2488	2509	0.8 %
4	- Activity rate (% of population 15-64)	73.9	74.1	74.2	73.7	74.0	0.3 pps
	Young (15-24)	42.7	41.9	41.6	39.2	36.7	-2.5 pps
	Prime age (25-54)	87.7	87.8	88.0	87.9	88.7	0.9 pps
	Older (55-64)	53.4	54.4	54.4	53.9	54.0	0.2 pps
	Nationals (15-64)	73.7	73.8	73.8	73.4	73.7	0.3 pps
	Non-nationals (15-64)	80.3	81.4	82.2	79.8	80.8	1.0 pps
	<i>Male</i>	79.5	79.4	79.5	78.5	78.2	-0.3 pps
	Young (15-24)	46.6	45.3	44.4	40.8	38.6	-2.2 pps
	Prime age (25-54)	92.9	92.8	93.2	92.4	92.5	0.1 pps
	Older (55-64)	62.7	63.0	63.0	62.7	61.8	-0.9 pps
	<i>Female</i>	68.4	68.8	68.9	69.0	69.9	0.9 pps
	Young (15-24)	38.7	38.4	38.6	37.5	34.8	-2.7 pps
	Prime age (25-54)	82.7	82.8	82.9	83.4	84.9	1.6 pps
	Older (55-64)	45.1	46.7	46.6	45.9	47.0	1.1 pps
5	- Employment rate (% of population 15-64)	67.9	67.8	68.2	66.3	65.6	-0.7 pps
	Young (15-24)	35.8	34.9	34.7	31.3	28.5	-2.8 pps
	Prime age (25-54)	81.3	81.0	81.6	79.7	79.2	-0.5 pps
	Older (55-64)	50.1	50.9	50.8	49.7	49.2	-0.5 pps
	Low-skilled (15-64)	62.7	64.2	64.4	61.0	58.0	-3.0 pps
	Medium-skilled (15-64)	74.2	70.2	67.4	70.4	75.3	4.9 pps
	High-skilled (15-64)	110.9	93.3	96.8	94.7	94.9	0.2 pps
	Nationals (15-64)	65.4	65.1	65.0	63.4	62.8	-0.6 pps
	Non-nationals (15-64)	2.4	2.7	3.1	2.9	2.8	-0.1 pps
	<i>Male</i>	73.9	73.8	74.0	71.1	70.1	-1.0 pps
	Young (15-24)	39.8	39.1	38.5	33.2	30.4	-2.8 pps
	Prime age (25-54)	87.4	87.2	87.6	84.5	83.9	-0.6 pps
	Older (55-64)	58.2	58.6	58.5	57.5	55.6	-1.9 pps
	<i>Female</i>	62.0	61.9	62.5	61.6	61.1	-0.5 pps
	Young (15-24)	31.6	30.6	30.8	29.4	26.5	-2.9 pps
	Prime age (25-54)	75.3	74.9	75.8	74.9	74.6	-0.4 pps
	Older (55-64)	42.8	44.0	43.9	42.7	43.5	0.7 pps
6	- Employed persons (15-64, 1000 pers.)	4830.3	4836.6	4872.2	4735.5	4663.4	-1.5 %
7	- Employment growth (% , National accounts)	0.5	0.0	0.5	-2.6	-1.5	1.1 pps
	Employment growth (% , 15-64, LFS)	:	:	:	:	:	pps
	<i>Male</i>	:	:	:	:	:	pps
	<i>Female</i>	:	:	:	:	:	pps
8	- Self employed (% of total employment)	19.0	19.0	18.8	18.5	17.5	-1.0 pps
	<i>Male</i>	11.0	11.2	10.9	11.1	10.5	-0.5 pps
	<i>Female</i>	8.0	7.8	7.9	7.5	7.0	-0.5 pps
9	- Temporary employment (% of total employment)	20.6	22.4	22.9	22.0	23.0	1.0 pps
	<i>Male</i>	19.5	21.8	21.7	20.8	22.4	1.6 pps
	<i>Female</i>	21.8	23.0	24.2	23.3	23.7	0.4 pps
10	- Part-time (% of total employment)	8.1	8.8	8.6	8.4	8.4	0.0 pps
	<i>Male</i>	4.1	4.7	4.1	4.3	4.9	0.6 pps
	<i>Female</i>	12.7	13.6	13.9	13.0	12.3	-0.7 pps
11	- Unemployment rate (harmonised:15-74)	:	8.9	:	:	:	pps
	Young (15-24)	16.3	16.6	16.4	20.0	22.4	2.4 pps
	Prime age (25-49)	7.4	7.9	7.4	9.5	11.1	1.6 pps
	Older (55-64)	6.3	6.5	6.6	7.7	8.9	1.2 pps
	Low-skilled (15-64)	8.4	8.7	8.3	11.0	12.5	1.5 pps
	Medium-skilled (15-64)	8.5	8.2	7.9	9.7	11.4	1.7 pps
	High-skilled (15-64)	6.4	7.6	7.0	6.5	7.2	0.7 pps
	Nationals (15-64)	8.0	8.3	7.9	9.7	11.1	1.4 pps
	Non-nationals (15-64)	11.1	12.1	10.9	16.4	18.9	2.5 pps
	<i>Male</i>	:	8.0	:	:	:	pps
	<i>Female</i>	:	10.0	:	:	:	pps
12	- Long-term unemployment rate (% of total unemployment)	50.2	47.1	47.4	44.2	52.3	8.1 pps
13	- Worked hours (average actual weekly hours)	40.7	40.5	40.4	40.4	40.5	0.2 %
	<i>Male</i>	41.5	41.3	41.2	41.2	41.3	0.2 %
	<i>Female</i>	39.6	39.5	39.4	39.3	39.5	0.5 %
14	- Sectoral employment growth (% change)						
	Agriculture	0.0	-1.9	-0.2	-3.4	-4.2	-0.8 pps
	Building and construction	-2.0	0.9	-2.5	-5.6	-3.8	1.8 pps
	Services	1.6	0.7	1.8	-1.7	-0.6	1.1 pps
	Manufacturing industry	-1.2	-1.7	-1.7	:	:	pps
15	- Indicator board on wage developments (% change)						
	Compensation per employee	1.8	3.6	3.0	3.4	1.5	-1.9 pps
	Real compensation per employee based on GDP	-0.9	0.4	1.4	2.8	0.4	-2.4 pps
	Hourly labour costs (Eurostat labour cost index)	1.3	5.3	4.3	3.3	1.4	-1.9 pps
	Wage and salaries	5.6	4.2	:	:	:	pps
	Labour productivity (GDP/person employed)	0.9	2.4	-0.5	0.1	2.9	2.8 pps

Romania		2006	2007	2008	2009	2010	2009-2010
1	- Population (total, 1000 pers.)	21575	21551	21517	21484	21447	-0.2 %
2	- Population (working age:15-64, 1000 pers.)	15035	15046	15042	15028	14999	-0.2 %
	(% of total population)	69.7	69.8	69.9	69.9	69.9	0.0 pps
3	- Labour force (15-64, 1000 pers.)	9566	9483	9457	9485	9547	0.6 %
	Male	5287	5261	5294	5313	5352	0.7 %
	Female	4279	4222	4164	4172	4195	0.5 %
4	- Activity rate (% of population 15-64)	63.6	63.0	62.9	63.1	63.6	0.5 pps
	Young (15-24)	30.6	30.5	30.4	30.9	31.2	0.3 pps
	Prime age (25-54)	79.9	79.0	78.3	78.5	79.5	1.0 pps
	Older (55-64)	42.8	42.4	44.2	43.9	42.5	-1.5 pps
	Nationals (15-64)	63.6	63.0	62.9	63.1	63.6	0.5 pps
	Non-nationals (15-64)	71.5	66.9	62.9	64.7	0.0	-64.7 pps
	Male	70.7	70.1	70.6	70.9	71.5	0.7 pps
	Young (15-24)	35.1	35.9	35.9	35.9	36.2	0.3 pps
	Prime age (25-54)	87.1	85.9	85.8	86.3	87.5	1.1 pps
	Older (55-64)	52.0	52.1	55.1	54.5	52.7	-1.8 pps
	Female	56.6	56.0	55.2	55.4	55.8	0.4 pps
	Young (15-24)	25.9	24.9	24.7	25.8	26.1	0.4 pps
	Prime age (25-54)	72.6	72.0	70.7	70.6	71.4	0.8 pps
	Older (55-64)	34.8	33.9	34.7	34.7	33.5	-1.1 pps
5	- Employment rate (% of population 15-64)	58.8	58.8	59.0	58.6	58.8	0.2 pps
	Young (15-24)	24.0	24.4	24.8	24.5	24.3	-0.2 pps
	Prime age (25-54)	74.7	74.6	74.4	73.7	74.4	0.6 pps
	Older (55-64)	41.7	41.4	43.1	42.6	41.1	-1.6 pps
	Low-skilled (15-64)	35.4	35.8	37.1	39.5	41.9	2.4 pps
	Medium-skilled (15-64)	68.1	67.4	65.3	62.5	60.6	-1.8 pps
	High-skilled (15-64)	104.2	99.7	101.3	98.6	98.9	0.3 pps
	Nationals (15-64)	58.7	58.7	59.0	58.5	58.8	0.3 pps
	Non-nationals (15-64)	0.1	0.1	0.1	0.1	0.0	-0.1 pps
	Male	64.6	64.8	65.7	65.2	65.7	0.5 pps
	Young (15-24)	27.3	28.3	29.1	28.3	28.1	-0.2 pps
	Prime age (25-54)	80.8	80.6	80.9	80.5	81.5	1.0 pps
	Older (55-64)	50.0	50.3	53.0	52.3	50.3	-2.0 pps
	Female	53.0	52.8	52.5	52.0	52.0	0.0 pps
	Young (15-24)	20.6	20.2	20.2	20.6	20.4	-0.2 pps
	Prime age (25-54)	68.6	68.5	67.8	66.9	67.2	0.2 pps
	Older (55-64)	34.5	33.6	34.4	34.1	33.0	-1.2 pps
6	- Employed persons (15-64, 1000 pers.)	8837.6	8842.5	8882.2	8804.7	8822.0	0.2 %
7	- Employment growth (% , National accounts)	0.7	0.4	0.0	-1.8	-1.8	0.0 pps
	Employment growth (% , 15-64, LFS)	:	:	:	:	:	: pps
	Male	:	:	:	:	:	: pps
	Female	:	:	:	:	:	: pps
8	- Self employed (% of total employment)	18.3	18.6	18.2	18.4	19.5	1.1 pps
	Male	13.3	13.4	13.2	13.4	14.3	0.9 pps
	Female	5.0	5.1	5.0	5.0	5.2	0.2 pps
9	- Temporary employment (% of total employment)	1.8	1.6	1.3	1.0	1.1	0.1 pps
	Male	2.0	1.7	1.3	1.1	1.2	0.1 pps
	Female	1.6	1.5	1.1	1.0	1.0	0.0 pps
10	- Part-time (% of total employment)	8.6	8.6	8.6	8.5	9.7	1.2 pps
	Male	8.7	8.3	8.1	8.0	9.6	1.6 pps
	Female	8.5	8.9	9.3	9.1	9.9	0.8 pps
11	- Unemployment rate (harmonised:15-74)	7.3	6.4	5.8	6.9	7.3	0.4 pps
	Young (15-24)	21.4	20.1	18.6	20.8	22.1	1.3 pps
	Prime age (25-49)	6.7	5.8	5.1	6.1	6.6	0.5 pps
	Older (55-64)	2.6	2.3	2.5	3.0	3.3	0.3 pps
	Low-skilled (15-64)	9.0	8.6	8.6	8.9	7.2	-1.7 pps
	Medium-skilled (15-64)	7.9	6.9	6.0	7.3	8.3	1.0 pps
	High-skilled (15-64)	3.8	3.0	2.7	4.4	5.4	1.0 pps
	Nationals (15-64)	7.6	6.8	6.1	7.2	7.6	0.4 pps
	Non-nationals (15-64)	:	:	:	:	:	: pps
	Male	8.2	7.2	6.7	7.7	7.9	0.2 pps
	Female	6.1	5.4	4.7	5.8	6.5	0.7 pps
12	- Long-term unemployment rate (% of total unemployment)	57.8	50.0	41.3	31.6	34.9	3.3 pps
13	- Worked hours (average actual weekly hours)	41.1	41.1	41.0	40.7	40.7	0.0 %
	Male	41.9	41.8	41.7	41.4	41.3	-0.2 %
	Female	40.2	40.1	40.0	39.9	40.0	0.3 %
14	- Sectoral employment growth (% change)						
	Agriculture	-7.5	-0.4	-1.5	-8.4	-9.2	-0.8 pps
	Building and construction	8.1	22.1	10.6	5.1	4.8	-0.3 pps
	Services	5.6	0.6	1.0	1.7	1.7	0.0 pps
	Manufacturing industry	3.0	-3.2	-2.3	-0.7	-0.8	-0.1 pps
15	- Indicator board on wage developments (% change)						
	Compensation per employee	12.4	22.0	31.9	-6.6	1.3	8.0 pps
	Real compensation per employee based on GDP	1.7	7.5	14.5	-10.3	-3.0	7.3 pps
	Hourly labour costs (Eurostat labour cost index)	19.1	21.0	20.6	11.8	6.0	-5.8 pps
	Wage and salaries	17.0	22.8	36.3	:	:	: pps
	Labour productivity (GDP/person employed)	7.1	5.9	7.3	-5.4	0.5	5.9 pps

Slovenia		2006	2007	2008	2009	2010	2009-2010
1	- Population (total, 1000 pers.)	2006	2015	2033	2037	2048	0.5 %
2	- Population (working age:15-64, 1000 pers.)	1407	1412	1422	1414	1422	0.6 %
	(% of total population)	70.1	70.1	70.0	69.4	69.4	0.0 pps
3	- Labour force (15-64, 1000 pers.)	998	1007	1021	1016	1017	0.1 %
	Male	537	547	554	550	551	0.3 %
	Female	461	460	466	466	466	-0.2 %
4	- Activity rate (% of population 15-64)	70.9	71.3	71.8	71.8	71.5	-0.3 pps
	Young (15-24)	40.6	41.8	42.9	40.9	39.9	-0.9 pps
	Prime age (25-54)	89.0	89.3	90.1	89.6	90.0	0.3 pps
	Older (55-64)	33.4	34.6	34.2	36.9	36.5	-0.4 pps
	Nationals (15-64)	70.9	71.3	71.8	71.9	71.5	-0.4 pps
	Non-nationals (15-64)	65.5	72.3	71.6	64.5	68.9	4.4 pps
	Male	74.9	75.8	75.8	75.6	75.4	-0.3 pps
	Young (15-24)	44.4	47.7	47.6	45.3	44.4	-1.0 pps
	Prime age (25-54)	91.0	91.3	91.6	91.2	91.7	0.5 pps
	Older (55-64)	45.7	46.7	46.4	48.2	47.5	-0.7 pps
	Female	66.8	66.6	67.5	67.9	67.4	-0.5 pps
	Young (15-24)	36.4	35.4	37.4	35.8	34.8	-1.0 pps
	Prime age (25-54)	87.0	87.3	88.5	88.0	88.1	0.1 pps
	Older (55-64)	21.4	23.1	22.2	25.6	25.5	-0.1 pps
5	- Employment rate (% of population 15-64)	66.6	67.8	68.6	67.5	66.2	-1.3 pps
	Young (15-24)	35.0	37.6	38.4	35.3	34.1	-1.2 pps
	Prime age (25-54)	84.2	85.3	86.8	84.9	83.7	-1.2 pps
	Older (55-64)	32.6	33.4	32.8	35.6	35.0	-0.5 pps
	Low-skilled (15-64)	37.2	37.7	39.7	37.7	37.6	0.0 pps
	Medium-skilled (15-64)	69.3	71.3	72.8	70.6	68.5	-2.0 pps
	High-skilled (15-64)	108.7	105.3	100.9	97.6	95.6	-2.0 pps
	Nationals (15-64)	66.3	67.2	67.7	66.8	65.2	-1.6 pps
	Non-nationals (15-64)	0.2	0.5	0.9	0.7	1.0	0.2 pps
	Male	71.1	72.7	72.7	71.0	69.6	-1.4 pps
	Young (15-24)	39.2	43.2	43.0	39.1	37.6	-1.5 pps
	Prime age (25-54)	87.1	88.1	88.6	86.4	85.2	-1.2 pps
	Older (55-64)	44.5	45.2	44.7	46.4	45.5	-0.9 pps
	Female	61.8	62.6	64.2	63.8	62.6	-1.3 pps
	Young (15-24)	30.3	31.5	33.2	31.0	30.0	-0.9 pps
	Prime age (25-54)	81.2	82.4	84.8	83.2	82.1	-1.1 pps
	Older (55-64)	21.0	22.2	21.1	24.8	24.6	-0.2 pps
6	- Employed persons (15-64, 1000 pers.)	936.7	957.0	975.2	954.8	941.5	-1.4 %
7	- Employment growth (% , National accounts)	1.6	3.3	2.6	-1.8	-2.0	-0.2 pps
	Employment growth (% , 15-64, LFS)	:	:	:	:	:	pps
	Male	:	:	:	:	:	pps
	Female	:	:	:	:	:	pps
8	- Self employed (% of total employment)	10.4	10.0	9.3	10.1	11.6	1.5 pps
	Male	7.8	7.4	6.8	7.5	8.2	0.7 pps
	Female	2.6	2.6	2.5	2.6	3.4	0.8 pps
9	- Temporary employment (% of total employment)	17.1	18.4	17.3	16.2	17.1	0.9 pps
	Male	15.2	16.3	15.2	14.9	15.2	0.3 pps
	Female	19.1	20.7	19.6	17.6	19.2	1.6 pps
10	- Part-time (% of total employment)	8.0	8.1	8.1	9.5	10.3	0.8 pps
	Male	6.0	6.5	6.2	7.4	7.4	0.0 pps
	Female	10.4	10.0	10.4	12.1	13.6	1.5 pps
11	- Unemployment rate (harmonised:15-74)	6.0	4.9	4.4	5.9	7.3	1.4 pps
	Young (15-24)	13.9	10.1	10.4	13.6	14.7	1.1 pps
	Prime age (25-49)	5.5	4.4	3.8	5.5	7.3	1.8 pps
	Older (55-64)	2.5	3.3	4.0	3.6	4.0	0.4 pps
	Low-skilled (15-64)	8.4	7.4	6.6	9.5	12.5	3.0 pps
	Medium-skilled (15-64)	6.6	5.0	4.4	6.4	7.6	1.2 pps
	High-skilled (15-64)	3.3	3.3	3.4	3.2	4.3	1.1 pps
	Nationals (15-64)	6.1	4.9	4.4	5.9	7.3	1.4 pps
	Non-nationals (15-64)	:	:	:	14.8	13.8	-1.0 pps
	Male	4.9	4.0	4.0	5.9	7.5	1.6 pps
	Female	7.2	5.9	4.8	5.8	7.1	1.3 pps
12	- Long-term unemployment rate (% of total unemployment)	49.3	45.7	42.2	30.1	43.3	13.2 pps
13	- Worked hours (average actual weekly hours)	41.7	41.8	41.6	41.3	41.2	-0.2 %
	Male	42.3	42.5	42.3	41.9	41.8	-0.2 %
	Female	40.8	40.8	40.6	40.4	40.4	0.0 %
14	- Sectoral employment growth (% change)						
	Agriculture	-3.1	-2.3	-2.0	-1.7	-1.9	-0.2 pps
	Building and construction	6.9	10.9	11.6	-1.8	-9.5	-7.7 pps
	Services	3.2	4.0	3.7	1.2	0.5	-0.7 pps
	Manufacturing industry	-1.6	0.8	-0.4	-9.4	-6.3	3.1 pps
15	- Indicator board on wage developments (% change)						
	Compensation per employee	5.4	6.2	7.2	1.8	3.9	2.0 pps
	Real compensation per employee based on GDP	3.2	2.0	3.0	-1.1	3.1	4.3 pps
	Hourly labour costs (Eurostat labour cost index)	5.6	5.3	9.5	2.5	2.4	-0.1 pps
	Wage and salaries	7.0	10.2	10.2	-1.1	:	pps
	Labour productivity (GDP/person employed)	4.2	3.4	1.1	-6.4	3.3	9.7 pps

Slovak Republic		2006	2007	2008	2009	2010	2009-2010
1	- Population (total, 1000 pers.)	5389	5391	5396	5409	5422	0.2 %
2	- Population (working age:15-64, 1000 pers.)	3862	3873	3892	3917	3926	0.2 %
	(% of total population)	71.7	71.8	72.1	72.4	72.4	0.0 pps
3	- Labour force (15-64, 1000 pers.)	2651	2646	2679	2680	2696	0.6 %
	Male	1468	1464	1481	1491	1491	0.0 %
	Female	1182	1182	1198	1189	1205	1.3 %
4	- Activity rate (% of population 15-64)	68.6	68.3	68.8	68.4	68.7	0.2 pps
	Young (15-24)	35.3	34.6	32.4	31.4	31.1	-0.3 pps
	Prime age (25-54)	87.6	86.9	87.8	87.2	86.9	-0.2 pps
	Older (55-64)	36.7	38.8	41.9	42.8	45.1	2.3 pps
	Nationals (15-64)	68.6	68.3	68.8	68.4	68.7	0.3 pps
	Non-nationals (15-64)	78.8	71.2	77.6	74.2	59.5	-14.7 pps
	Male	76.4	75.9	76.4	76.3	76.1	-0.2 pps
	Young (15-24)	39.6	38.9	37.8	37.1	36.4	-0.7 pps
	Prime age (25-54)	94.0	93.1	93.4	93.6	92.9	-0.6 pps
	Older (55-64)	55.2	57.0	59.9	58.7	59.7	1.1 pps
	Female	60.9	60.8	61.3	60.6	61.3	0.7 pps
	Young (15-24)	30.8	30.2	26.8	25.4	25.5	0.1 pps
	Prime age (25-54)	81.2	80.7	82.1	80.7	80.9	0.1 pps
	Older (55-64)	20.9	23.3	26.4	29.0	32.2	3.3 pps
5	- Employment rate (% of population 15-64)	59.4	60.7	62.3	60.2	58.8	-1.4 pps
	Young (15-24)	25.9	27.6	26.2	22.8	20.6	-2.2 pps
	Prime age (25-54)	77.2	78.0	80.1	77.8	75.8	-2.0 pps
	Older (55-64)	33.1	35.6	39.2	39.5	40.5	1.0 pps
	Low-skilled (15-64)	13.7	13.0	14.2	12.7	12.7	0.1 pps
	Medium-skilled (15-64)	69.1	72.2	72.8	68.9	65.0	-3.9 pps
	High-skilled (15-64)	110.5	98.0	92.7	91.7	100.1	8.3 pps
	Nationals (15-64)	59.3	60.6	62.1	60.1	58.6	-1.4 pps
	Non-nationals (15-64)	0.1	0.1	0.1	0.1	0.1	0.0 pps
	Male	67.0	68.4	70.0	67.6	65.2	-2.4 pps
	Young (15-24)	29.2	30.9	30.8	26.8	23.8	-3.0 pps
	Prime age (25-54)	84.1	85.0	86.4	84.2	81.4	-2.8 pps
	Older (55-64)	49.8	52.6	56.7	54.9	54.0	-0.9 pps
	Female	51.9	53.0	54.6	52.8	52.3	-0.5 pps
	Young (15-24)	22.5	24.1	21.5	18.7	17.4	-1.3 pps
	Prime age (25-54)	70.3	71.0	73.7	71.2	70.1	-1.1 pps
	Older (55-64)	18.9	21.2	24.2	26.1	28.7	2.6 pps
6	- Employed persons (15-64, 1000 pers.)	2295.2	2350.5	2423.4	2356.6	2307.2	-2.1 %
7	- Employment growth (% , National accounts)	2.1	2.1	2.9	-2.5	-1.4	1.1 pps
	Employment growth (% , 15-64, LFS)	:	:	:	:	:	pps
	Male	:	:	:	:	:	pps
	Female	:	:	:	:	:	pps
8	- Self employed (% of total employment)	12.5	12.8	13.6	15.5	15.8	0.3 pps
	Male	9.3	9.6	10.3	11.3	11.7	0.4 pps
	Female	3.2	3.1	3.3	4.2	4.1	-0.1 pps
9	- Temporary employment (% of total employment)	5.0	5.0	4.5	4.3	5.6	1.3 pps
	Male	4.9	4.9	4.4	4.5	5.5	1.0 pps
	Female	5.0	5.1	4.7	4.0	5.8	1.8 pps
10	- Part-time (% of total employment)	2.7	2.5	2.5	3.4	3.8	0.4 pps
	Male	1.2	1.0	1.3	2.6	2.6	0.0 pps
	Female	4.5	4.3	4.1	4.5	5.2	0.7 pps
11	- Unemployment rate (harmonised:15-74)	13.4	11.1	9.5	12.0	14.4	2.4 pps
	Young (15-24)	26.6	20.3	19.0	27.3	33.6	6.3 pps
	Prime age (25-49)	11.9	10.2	8.8	10.9	13.0	2.1 pps
	Older (55-64)	9.8	8.2	6.4	7.7	10.1	2.4 pps
	Low-skilled (15-64)	48.6	45.1	39.6	41.7	44.3	2.6 pps
	Medium-skilled (15-64)	11.8	9.4	8.1	11.5	14.1	2.6 pps
	High-skilled (15-64)	3.3	4.1	3.6	4.3	5.8	1.5 pps
	Nationals (15-64)	13.4	11.2	9.6	12.1	14.5	2.4 pps
	Non-nationals (15-64)	:	:	:	:	:	pps
	Male	12.3	9.9	8.4	11.4	14.2	2.8 pps
	Female	14.7	12.7	10.9	12.8	14.6	1.8 pps
12	- Long-term unemployment rate (% of total unemployment)	76.3	74.2	69.5	54.0	64.0	10.0 pps
13	- Worked hours (average actual weekly hours)	40.7	40.8	40.4	39.9	40.3	1.0 %
	Male	41.6	41.7	41.3	40.7	41.1	1.0 %
	Female	39.4	39.5	39.1	38.8	39.2	1.0 %
14	- Sectoral employment growth (% change)						
	Agriculture	-7.5	-5.1	-1.8	-12.6	-8.0	4.6 pps
	Building and construction	4.3	5.1	7.4	4.4	-2.5	-6.9 pps
	Services	3.0	2.6	2.8	0.0	0.0	0.0 pps
	Manufacturing industry	1.3	1.8	3.4	-9.7	-3.9	5.8 pps
15	- Indicator board on wage developments (% change)						
	Compensation per employee	7.9	8.4	6.9	5.0	2.7	-2.4 pps
	Real compensation per employee based on GDP	4.8	7.2	3.9	6.3	2.2	-4.1 pps
	Hourly labour costs (Eurostat labour cost index)	7.5	7.0	5.5	3.7	1.4	-2.3 pps
	Wage and salaries	10.7	10.7	7.7	1.4	:	pps
	Labour productivity (GDP/person employed)	6.3	8.3	2.8	-2.3	5.5	7.8 pps

Finland		2006	2007	2008	2009	2010	2009-2010
1	- Population (total, 1000 pers.)	5242	5266	5289	5317	5343	0.5 %
2	- Population (working age:15-64, 1000 pers.)	3484	3497	3514	3527	3537	0.3 %
	(% of total population)	66.5	66.4	66.4	66.3	66.2	-0.2 pps
3	- Labour force (15-64, 1000 pers.)	2620	2642	2669	2644	2634	-0.4 %
	<i>Male</i>	1350	1358	1376	1355	1360	0.4 %
	<i>Female</i>	1270	1284	1293	1289	1274	-1.1 %
4	- Activity rate (% of population 15-64)	75.2	75.6	76.0	75.0	74.5	-0.5 pps
	Young (15-24)	51.8	53.4	53.5	50.4	49.4	-1.0 pps
	Prime age (25-54)	87.8	88.0	88.6	88.2	87.5	-0.7 pps
	Older (55-64)	58.5	58.8	59.7	59.1	60.2	1.0 pps
	Nationals (15-64)	75.3	75.7	76.0	75.0	74.6	-0.4 pps
	Non-nationals (15-64)	69.0	70.5	72.3	71.7	69.3	-2.4 pps
	<i>Male</i>	77.1	77.2	77.9	76.4	76.4	0.1 pps
	Young (15-24)	52.6	53.2	53.4	49.7	49.4	-0.3 pps
	Prime age (25-54)	90.3	90.4	91.2	90.6	90.5	-0.1 pps
	Older (55-64)	58.8	59.1	60.6	58.7	60.1	1.3 pps
	<i>Female</i>	73.3	73.8	73.9	73.5	72.5	-1.0 pps
	Young (15-24)	51.0	53.6	53.5	51.2	49.3	-1.9 pps
	Prime age (25-54)	85.3	85.6	85.9	85.7	84.4	-1.3 pps
	Older (55-64)	58.2	58.4	58.8	59.5	60.3	0.8 pps
5	- Employment rate (% of population 15-64)	69.3	70.3	71.1	68.7	68.1	-0.6 pps
	Young (15-24)	42.1	44.6	44.7	39.6	38.8	-0.8 pps
	Prime age (25-54)	82.4	83.3	84.3	82.4	81.6	-0.8 pps
	Older (55-64)	54.5	55.0	56.5	55.5	56.3	0.8 pps
	Low-skilled (15-64)	41.4	42.9	43.7	40.4	38.7	-1.7 pps
	Medium-skilled (15-64)	75.5	75.5	76.2	72.8	72.3	-0.4 pps
	High-skilled (15-64)	91.0	91.4	91.6	90.9	89.4	-1.5 pps
	Nationals (15-64)	68.3	69.2	69.8	67.4	66.8	-0.6 pps
	Non-nationals (15-64)	1.0	1.1	1.3	1.3	1.3	0.0 pps
	<i>Male</i>	71.4	72.1	73.1	69.5	69.4	-0.1 pps
	Young (15-24)	42.6	44.5	44.3	37.7	37.7	0.0 pps
	Prime age (25-54)	85.2	86.0	87.3	84.3	83.9	-0.4 pps
	Older (55-64)	54.8	55.1	57.1	54.6	55.6	1.0 pps
	<i>Female</i>	67.3	68.5	69.0	67.9	66.9	-1.0 pps
	Young (15-24)	41.6	44.7	45.0	41.5	40.0	-1.5 pps
	Prime age (25-54)	79.6	80.6	81.2	80.5	79.2	-1.3 pps
	Older (55-64)	54.3	55.0	55.9	56.3	56.9	0.6 pps
6	- Employed persons (15-64, 1000 pers.)	2416.1	2458.5	2497.2	2423.3	2410.1	-0.5 %
7	- Employment growth (% , National accounts)	1.8	2.2	1.6	-2.7	-0.4	2.3 pps
	Employment growth (% , 15-64, LFS)	:	:	:	:	:	: pps
	<i>Male</i>	:	:	:	:	:	: pps
	<i>Female</i>	:	:	:	:	:	: pps
8	- Self employed (% of total employment)	11.9	11.5	11.8	12.6	12.2	-0.3 pps
	<i>Male</i>	8.2	7.9	8.0	8.5	8.3	-0.2 pps
	<i>Female</i>	3.7	3.7	3.8	4.1	4.0	-0.1 pps
9	- Temporary employment (% of total employment)	16.3	15.9	14.9	14.5	15.4	0.9 pps
	<i>Male</i>	12.6	12.3	11.1	10.5	12.3	1.8 pps
	<i>Female</i>	20.0	19.4	18.7	18.3	18.4	0.1 pps
10	- Part-time (% of total employment)	13.5	13.4	12.7	13.3	13.9	0.6 pps
	<i>Male</i>	8.6	8.3	7.9	8.3	8.9	0.6 pps
	<i>Female</i>	18.7	18.8	17.8	18.5	19.0	0.5 pps
11	- Unemployment rate (harmonised:15-74)	7.7	6.9	6.4	8.2	8.4	0.2 pps
	Young (15-24)	18.7	16.5	16.5	21.5	21.4	-0.1 pps
	Prime age (25-49)	6.1	5.3	4.9	6.7	6.8	0.1 pps
	Older (55-64)	6.8	6.3	5.4	6.2	6.5	0.3 pps
	Low-skilled (15-64)	14.2	13.0	12.8	15.3	16.7	1.4 pps
	Medium-skilled (15-64)	8.2	7.1	6.4	9.2	9.0	-0.2 pps
	High-skilled (15-64)	3.7	3.6	3.3	4.1	4.5	0.4 pps
	Nationals (15-64)	7.6	6.8	6.2	8.1	8.2	0.1 pps
	Non-nationals (15-64)	18.5	16.7	15.8	18.0	19.6	1.6 pps
	<i>Male</i>	7.4	6.5	6.1	8.9	9.1	0.2 pps
	<i>Female</i>	8.1	7.2	6.7	7.6	7.6	0.0 pps
12	- Long-term unemployment rate (% of total unemployment)	25.2	22.8	18.4	16.7	24.0	7.3 pps
13	- Worked hours (average actual weekly hours)	39.3	39.2	39.2	38.6	39.0	1.0 %
	<i>Male</i>	40.9	40.7	40.6	40.1	40.4	0.7 %
	<i>Female</i>	37.4	37.4	37.3	36.8	37.2	1.1 %
14	- Sectoral employment growth (% change)						
	Agriculture	-0.3	0.2	-0.9	-0.4	-4.4	-4.0 pps
	Building and construction	4.0	7.1	3.6	-7.0	-0.8	6.2 pps
	Services	2.0	2.2	2.2	-0.6	0.8	1.5 pps
	Manufacturing industry	0.8	0.9	-1.0	-10.1	-4.4	5.7 pps
15	- Indicator board on wage developments (% change)						
	Compensation per employee	2.9	3.7	5.1	1.7	2.0	0.2 pps
	Real compensation per employee based on GDP	2.0	0.6	3.2	0.7	-0.2	-0.9 pps
	Hourly labour costs (Eurostat labour cost index)	:	:	:	:	:	: pps
	Wage and salaries	4.9	6.1	6.5	-1.2	:	: pps
	Labour productivity (GDP/person employed)	2.5	3.1	-0.6	-5.6	3.5	9.1 pps

Sweden		2006	2007	2008	2009	2010	2009-2010
1	- Population (total, 1000 pers.)	9084	9147	9203	9297	9363	0.7 %
2	- Population (working age:15-64, 1000 pers.)	5951	6002	6046	6080	6101	0.3 %
	(% of total population)	65.5	65.6	65.7	65.4	65.2	-0.2 pps
3	- Labour force (15-64, 1000 pers.)	4687	4750	4797	4799	4852	1.1 %
	Male	2452	2482	2508	2513	2550	1.5 %
	Female	2235	2268	2289	2286	2302	0.7 %
4	- Activity rate (% of population 15-64)	78.8	79.1	79.3	78.9	79.5	0.6 pps
	Young (15-24)	51.3	52.2	52.8	51.0	51.7	0.7 pps
	Prime age (25-54)	89.4	90.0	90.4	90.0	90.6	0.6 pps
	Older (55-64)	72.8	72.8	72.8	73.9	74.5	0.6 pps
	Nationals (15-64)	79.3	79.7	79.8	79.4	80.1	0.8 pps
	Non-nationals (15-64)	68.1	68.6	71.8	72.5	71.0	-1.4 pps
	Male	81.2	81.4	81.7	81.4	82.3	0.9 pps
	Young (15-24)	50.8	51.8	52.6	51.1	52.1	1.0 pps
	Prime age (25-54)	92.5	92.9	93.1	92.8	93.6	0.8 pps
	Older (55-64)	76.0	76.2	76.5	77.8	79.1	1.4 pps
	Female	76.3	76.8	76.9	76.4	76.7	0.3 pps
	Young (15-24)	51.9	52.7	53.1	51.0	51.4	0.4 pps
	Prime age (25-54)	86.3	87.1	87.6	87.1	87.5	0.4 pps
	Older (55-64)	69.6	69.4	69.0	69.9	69.8	-0.1 pps
5	- Employment rate (% of population 15-64)	73.1	74.2	74.3	72.2	72.7	0.5 pps
	Young (15-24)	40.3	42.2	42.2	38.3	38.7	0.4 pps
	Prime age (25-54)	84.7	86.1	86.5	84.5	85.0	0.6 pps
	Older (55-64)	69.6	70.0	70.1	70.0	70.5	0.5 pps
	Low-skilled (15-64)	66.0	67.9	66.1	50.2	49.4	-0.8 pps
	Medium-skilled (15-64)	72.7	74.1	75.7	80.1	80.5	0.4 pps
	High-skilled (15-64)	97.4	97.9	95.8	94.7	96.2	1.4 pps
	Nationals (15-64)	70.0	71.2	71.1	68.8	69.2	0.4 pps
	Non-nationals (15-64)	3.1	3.0	3.2	3.3	3.4	0.1 pps
	Male	75.5	76.5	76.7	74.2	75.1	0.9 pps
	Young (15-24)	40.2	42.0	42.2	37.6	38.2	0.6 pps
	Prime age (25-54)	87.8	89.1	89.4	86.9	88.0	1.1 pps
	Older (55-64)	72.3	72.9	73.4	73.2	74.2	1.0 pps
	Female	70.7	71.8	71.8	70.2	70.3	0.1 pps
	Young (15-24)	40.4	42.3	42.1	38.9	39.2	0.3 pps
	Prime age (25-54)	81.5	83.0	83.5	81.9	82.0	0.0 pps
	Older (55-64)	66.9	67.0	66.7	66.7	66.8	0.0 pps
6	- Employed persons (15-64, 1000 pers.)	4351.9	4453.3	4493.8	4391.4	4437.5	1.0 %
7	- Employment growth (% , National accounts)	1.7	2.3	0.9	-2.0	1.1	3.1 pps
	Employment growth (% , 15-64, LFS)	:	:	:	:	:	: pps
	Male	:	:	:	:	:	: pps
	Female	:	:	:	:	:	: pps
8	- Self employed (% of total employment)	9.8	9.6	9.4	9.6	9.8	0.2 pps
	Male	7.3	7.1	6.9	7.0	7.1	0.1 pps
	Female	2.5	2.4	2.5	2.6	2.7	0.1 pps
9	- Temporary employment (% of total employment)	17.0	17.2	15.8	14.9	15.4	0.5 pps
	Male	15.0	14.7	13.2	12.6	13.5	0.9 pps
	Female	18.9	19.7	18.5	17.3	17.3	0.0 pps
10	- Part-time (% of total employment)	24.3	24.2	25.7	26.0	25.3	-0.7 pps
	Male	10.6	10.5	11.9	12.6	12.2	-0.4 pps
	Female	39.7	39.5	40.9	40.5	39.7	-0.8 pps
11	- Unemployment rate (harmonised:15-74)	7.1	6.1	6.2	8.3	8.4	0.1 pps
	Young (15-24)	21.5	19.3	20.2	25.0	25.2	0.2 pps
	Prime age (25-49)	5.5	4.6	4.5	6.5	6.4	-0.1 pps
	Older (55-64)	4.4	4.0	3.8	5.3	5.4	0.1 pps
	Low-skilled (15-64)	12.7	11.9	12.6	16.7	18.2	1.5 pps
	Medium-skilled (15-64)	6.1	5.2	5.0	7.7	7.6	-0.1 pps
	High-skilled (15-64)	4.4	3.6	3.4	4.5	4.5	0.0 pps
	Nationals (15-64)	6.8	5.9	5.9	8.0	7.9	-0.1 pps
	Non-nationals (15-64)	13.7	13.0	14.3	16.8	18.8	2.0 pps
	Male	6.9	5.9	5.9	8.6	8.5	-0.1 pps
	Female	7.2	6.5	6.6	8.0	8.2	0.2 pps
12	- Long-term unemployment rate (% of total unemployment)	:	13.9	12.7	13.2	17.8	4.6 pps
13	- Worked hours (average actual weekly hours)	39.7	39.6	39.6	39.2	39.9	1.8 %
	Male	40.6	40.5	40.5	40.0	40.7	1.8 %
	Female	38.1	38.1	38.2	37.9	38.5	1.6 %
14	- Sectoral employment growth (% change)						
	Agriculture	-2.1	-1.7	1.7	-1.8	2.7	4.5 pps
	Building and construction	6.4	7.6	7.3	-1.2	5.2	6.4 pps
	Services	2.0	2.1	0.5	-0.5	1.1	1.6 pps
	Manufacturing industry	-0.8	2.2	0.1	-9.9	-1.1	8.8 pps
15	- Indicator board on wage developments (% change)						
	Compensation per employee	2.1	5.2	1.5	1.3	2.7	1.4 pps
	Real compensation per employee based on GDP	0.1	2.4	-1.6	-0.6	1.4	2.0 pps
	Hourly labour costs (Eurostat labour cost index)	1.7	3.4	2.5	3.7	1.8	-1.9 pps
	Wage and salaries	5.4	7.0	5.5	0.1	:	: pps
	Labour productivity (GDP/person employed)	2.6	1.0	-1.5	-3.4	4.5	7.9 pps

United Kingdom		2006	2007	2008	2009	2010	2009-2010
1	- Population (total, 1000 pers.)	59518	59862	60305	60734	61099	0.6 %
2	- Population (working age:15-64, 1000 pers.)	39540	39845	40094	40318	40441	0.3 %
	(% of total population)	66.4	66.6	66.5	66.4	66.2	-0.2 pps
3	- Labour force (15-64, 1000 pers.)	29935	30089	30409	30525	30529	0.0 %
	Male	16159	16260	16416	16433	16433	0.0 %
	Female	13776	13829	13993	14093	14096	0.0 %
4	- Activity rate (% of population 15-64)	75.7	75.5	75.8	75.7	75.5	-0.2 pps
	Young (15-24)	62.5	61.7	61.7	59.7	59.2	-0.6 pps
	Prime age (25-54)	84.5	84.5	84.9	85.1	85.0	-0.1 pps
	Older (55-64)	59.1	59.3	59.9	60.3	59.9	-0.4 pps
	Nationals (15-64)	75.9	75.8	76.1	76.0	75.7	-0.2 pps
	Non-nationals (15-64)	73.1	72.5	73.3	73.1	73.6	0.5 pps
	Male	82.3	82.2	82.4	82.0	81.7	-0.3 pps
	Young (15-24)	65.1	64.6	64.8	62.0	61.8	-0.2 pps
	Prime age (25-54)	91.6	91.6	91.6	91.7	91.4	-0.2 pps
	Older (55-64)	68.4	69.0	69.9	70.3	69.1	-1.2 pps
	Female	69.2	69.0	69.4	69.5	69.4	-0.1 pps
	Young (15-24)	59.7	58.7	58.4	57.4	56.4	-1.0 pps
	Prime age (25-54)	77.6	77.6	78.2	78.7	78.6	-0.1 pps
	Older (55-64)	50.1	50.0	50.2	50.6	51.1	0.4 pps
5	- Employment rate (% of population 15-64)	71.6	71.5	71.5	69.9	69.5	-0.4 pps
	Young (15-24)	53.8	52.9	52.4	48.4	47.6	-0.8 pps
	Prime age (25-54)	81.2	81.3	81.4	80.2	79.8	-0.3 pps
	Older (55-64)	57.3	57.4	58.0	57.5	57.1	-0.5 pps
	Low-skilled (15-64)	56.6	55.0	55.4	52.9	48.9	-4.0 pps
	Medium-skilled (15-64)	96.3	79.7	78.8	75.0	74.8	-0.3 pps
	High-skilled (15-64)	99.3	98.2	97.1	96.3	96.9	0.7 pps
	Nationals (15-64)	66.8	66.2	65.8	64.2	63.7	-0.5 pps
	Non-nationals (15-64)	4.7	5.3	5.7	5.7	5.7	0.0 pps
	Male	77.5	77.5	77.3	74.8	74.5	-0.3 pps
	Young (15-24)	54.9	54.4	53.8	48.5	48.5	0.0 pps
	Prime age (25-54)	87.9	88.2	87.7	85.7	85.4	-0.3 pps
	Older (55-64)	66.0	66.3	67.3	66.2	65.0	-1.2 pps
	Female	65.8	65.5	65.8	65.0	64.6	-0.5 pps
	Young (15-24)	52.6	51.4	51.0	48.2	46.6	-1.5 pps
	Prime age (25-54)	74.6	74.6	75.2	74.7	74.3	-0.3 pps
	Older (55-64)	49.0	48.9	49.0	49.2	49.5	0.3 pps
6	- Employed persons (15-64, 1000 pers.)	28306.7	28477.7	28670.8	28183.5	28109.6	-0.3 %
7	- Employment growth (% , National accounts)	0.9	0.7	0.7	-1.6	0.2	1.8 pps
	Employment growth (% , 15-64, LFS)	:	:	:	:	:	pps
	Male	:	:	:	:	:	pps
	Female	:	:	:	:	:	pps
8	- Self employed (% of total employment)	12.4	12.6	12.5	12.7	13.0	0.2 pps
	Male	9.0	9.1	9.1	9.1	9.1	0.1 pps
	Female	3.4	3.5	3.5	3.7	3.8	0.2 pps
9	- Temporary employment (% of total employment)	5.7	5.7	5.3	5.5	6.0	0.5 pps
	Male	5.0	5.1	4.7	5.1	5.6	0.5 pps
	Female	6.4	6.4	5.9	5.9	6.4	0.5 pps
10	- Part-time (% of total employment)	24.3	24.2	24.2	25.0	25.7	0.7 pps
	Male	9.2	9.4	9.8	10.4	11.0	0.6 pps
	Female	41.7	41.4	41.0	41.7	42.4	0.7 pps
11	- Unemployment rate (harmonised:15-74)	5.4	5.3	5.6	7.6	7.8	0.2 pps
	Young (15-24)	14.0	14.3	15.0	19.1	19.6	0.5 pps
	Prime age (25-49)	4.1	3.9	4.3	6.0	6.3	0.3 pps
	Older (55-64)	3.0	3.2	3.1	4.6	4.7	0.1 pps
	Low-skilled (15-64)	9.2	9.5	10.4	13.3	14.2	0.9 pps
	Medium-skilled (15-64)	5.3	5.2	5.6	7.9	8.3	0.4 pps
	High-skilled (15-64)	2.8	2.6	2.8	4.0	4.1	0.1 pps
	Nationals (15-64)	5.2	5.2	5.6	7.6	7.8	0.2 pps
	Non-nationals (15-64)	8.4	7.7	7.0	8.9	9.0	0.1 pps
	Male	5.8	5.6	6.1	8.6	8.6	0.0 pps
	Female	4.9	5.0	5.1	6.4	6.8	0.4 pps
12	- Long-term unemployment rate (% of total unemployment)	22.2	23.7	24.1	24.5	32.6	8.1 pps
13	- Worked hours (average actual weekly hours)	41.3	41.3	41.0	41.0	41.1	0.2 %
	Male	42.7	42.7	42.4	42.3	42.4	0.2 %
	Female	38.6	38.6	38.4	38.6	38.6	0.0 %
14	- Sectoral employment growth (% change)						
	Agriculture	-2.8	0.4	4.5	3.1	:	pps
	Building and construction	1.5	2.1	-0.6	-7.1	:	pps
	Services	1.5	0.8	0.8	-1.4	:	pps
	Manufacturing industry	-2.8	-2.0	-4.7	-6.5	:	pps
15	- Indicator board on wage developments (% change)						
	Compensation per employee	4.5	5.0	1.5	2.5	3.3	0.8 pps
	Real compensation per employee based on GDP	1.8	2.0	-1.5	1.1	0.4	-0.7 pps
	Hourly labour costs (Eurostat labour cost index)	4.8	4.7	4.3	0.2	2.1	1.9 pps
	Wage and salaries	:	:	:	:	:	pps
	Labour productivity (GDP/person employed)	1.9	2.0	-0.8	-3.4	1.1	4.5 pps

APPENDIX 2

Policy indicators

Belgium			
List of policy variables	Last three data points		
Monthly minimum wage (proportion of average monthly earnings, %); Eurostat	2008	2009	2010
mean	:	:	:
median	:	:	:
	2008	2009	2010
Social security and other labour costs paid by employer	:	:	:
Total tax wedge (incl.employers SSC) - Married couple, no children, 100% and 100% of AW	55.87	55.33	55.34
Total tax wedge (incl.employers SSC) - Married couple, 2 children, 100% and 100% of AW	51.58	50.96	51.00
Tax wedge, average wage person, no children; EC/OECD	55.88	55.35	55.37
Tax wedge, low wage person, no children; EC/OECD	50.18	49.41	49.47
	1998	2003	2008
Employment Protection Legislation overall; OECD	2.15	2.18	2.18
Employment Protection Legislation for regular employment; OECD	1.68	1.73	1.73
Employment Protection Legislation for temporary employment; OECD	2.63	2.63	2.63
Employment Protection Legislation for collective dismissals; OECD	4.13	4.13	4.13
	2007	2008	2009
NRR; average wage person; no children; 2nd month of unemployment; incl. SA; EC/OECD	0.58	0.57	0.67
NRR; average wage person; no children; 7th month of unemployment; incl. SA; EC/OECD	0.58	0.57	0.62
NRR; average wage person; no children; 13th month of unemployment; incl. SA; EC/OECD	0.48	0.51	0.52
NRR; average wage person; no children; 60th month of unemployment; incl. SA; EC/OECD	0.48	0.51	0.52
	2008	2009	2010
Unemployment benefit duration_maximum; EC/OECD	unlimited	unlimited	unlimited
Unemployment benefit duration_minimum; EC/OECD	unlimited	unlimited	unlimited

Bulgaria			
List of policy variables	Last three data points		
Monthly minimum wage (proportion of average monthly earnings, %); Eurostat	2008	2009	2010
mean	39.50	38.30	:
median	:	:	:
	2008	2009	2010
Social security and other labour costs paid by employer	18.30	16.70	:
Total tax wedge (incl.employers SSC) - Married couple, no children, 100% and 100% of AW	35.10	33.81	:
Total tax wedge (incl.employers SSC) - Married couple, 2 children, 100% and 100% of AW	31.29	29.00	:
Tax wedge, average wage person, no children; EC/OECD	:	:	:
Tax wedge, low wage person, no children; EC/OECD	:	:	:
	1998	2003	2008
Employment Protection Legislation overall; OECD	:	:	:
Employment Protection Legislation for regular employment; OECD	:	:	:
Employment Protection Legislation for temporary employment; OECD	:	:	:
Employment Protection Legislation for collective dismissals; OECD	:	:	:
	2007	2008	2009
NRR; average wage person; no children; 2nd month of unemployment; incl. SA; EC/OECD	:	0.47	0.54
NRR; average wage person; no children; 7th month of unemployment; incl. SA; EC/OECD	:	0.47	0.54
NRR; average wage person; no children; 13th month of unemployment; incl. SA; EC/OECD	:	0.00	0.00
NRR; average wage person; no children; 60th month of unemployment; incl. SA; EC/OECD	:	0.00	0.00
	2008	2009	2010
Unemployment benefit duration_maximum; EC/OECD	12	12	12
Unemployment benefit duration_minimum; EC/OECD	4	4	4

Czech Republic			
List of policy variables	Last three data points		
Monthly minimum wage (proportion of average monthly earnings, %); Eurostat	2008	2009	2010
mean	35.20	33.80	:
median	:	:	:
	2008	2009	2010
Social security and other labour costs paid by employer	15.20	14.70	:
Total tax wedge (incl.employers SSC) - Married couple, no children, 100% and 100% of AW	:	:	:
Total tax wedge (incl.employers SSC) - Married couple, 2 children, 100% and 100% of AW	:	:	:
Tax wedge, average wage person, no children; EC/OECD	43.44	42.01	42.16
Tax wedge, low wage person, no children; EC/OECD	40.06	38.72	38.94
	1998	2003	2008
Employment Protection Legislation overall; OECD	1.90	1.90	1.96
Employment Protection Legislation for regular employment; OECD	3.31	3.31	3.05
Employment Protection Legislation for temporary employment; OECD	0.50	0.50	0.88
Employment Protection Legislation for collective dismissals; OECD	2.13	2.13	2.13
	2007	2008	2009
NRR; average wage person; no children; 2nd month of unemployment; incl. SA; EC/OECD	0.52	0.53	0.66
NRR; average wage person; no children; 7th month of unemployment; incl. SA; EC/OECD	0.13	0.15	0.18
NRR; average wage person; no children; 13th month of unemployment; incl. SA; EC/OECD	0.13	0.15	0.18
NRR; average wage person; no children; 60th month of unemployment; incl. SA; EC/OECD	0.13	0.15	0.18
	2008	2009	2010
Unemployment benefit duration_maximum; EC/OECD	12	11	11
Unemployment benefit duration_minimum; EC/OECD	6	5	5

Denmark			
List of policy variables	Last three data points		
Monthly minimum wage (proportion of average monthly earnings, %); Eurostat	2008	2009	2010
mean	:	:	:
median	:	:	:
	2008	2009	2010
Social security and other labour costs paid by employer	:	:	:
Total tax wedge (incl.employers SSC) - Married couple, no children, 100% and 100% of AW	51.46	50.89	49.05
Total tax wedge (incl.employers SSC) - Married couple, 2 children, 100% and 100% of AW	47.04	46.22	44.10
Tax wedge, average wage person, no children; EC/OECD	40.90	39.53	38.29
Tax wedge, low wage person, no children; EC/OECD	38.53	37.98	36.67
	1998	2003	2008
Employment Protection Legislation overall; OECD	1.50	1.50	1.50
Employment Protection Legislation for regular employment; OECD	1.63	1.63	1.63
Employment Protection Legislation for temporary employment; OECD	1.38	1.38	1.38
Employment Protection Legislation for collective dismissals; OECD	3.88	3.88	3.13
	2007	2008	2009
NRR; average wage person; no children; 2nd month of unemployment; incl. SA; EC/OECD	0.61	0.61	0.60
NRR; average wage person; no children; 7th month of unemployment; incl. SA; EC/OECD	0.61	0.61	0.60
NRR; average wage person; no children; 13th month of unemployment; incl. SA; EC/OECD	0.61	0.61	0.60
NRR; average wage person; no children; 60th month of unemployment; incl. SA; EC/OECD	0.05	0.05	0.05
	2008	2009	2010
Unemployment benefit duration_maximum; EC/OECD	48	48	48
Unemployment benefit duration_minimum; EC/OECD	48	48	48

Germany			
List of policy variables	Last three data points		
Monthly minimum wage (proportion of average monthly earnings, %); Eurostat	2008	2009	2010
mean	:	:	:
median	:	:	:
	2008	2009	2010
Social security and other labour costs paid by employer	26.30	27.00	:
Total tax wedge (incl.employers SSC) - Married couple, no children, 100% and 100% of AW	43.44	42.01	42.16
Total tax wedge (incl.employers SSC) - Married couple, 2 children, 100% and 100% of AW	37.90	37.24	37.26
Tax wedge, average wage person, no children; EC/OECD	51.46	50.89	49.05
Tax wedge, low wage person, no children; EC/OECD	46.59	45.98	44.85
	1998	2003	2008
Employment Protection Legislation overall; OECD	2.34	2.09	2.12
Employment Protection Legislation for regular employment; OECD	2.68	2.68	3.00
Employment Protection Legislation for temporary employment; OECD	2.00	1.50	1.25
Employment Protection Legislation for collective dismissals; OECD	3.75	3.75	3.75
	2007	2008	2009
NRR; average wage person; no children; 2nd month of unemployment; incl. SA; EC/OECD	0.60	0.60	0.60
NRR; average wage person; no children; 7th month of unemployment; incl. SA; EC/OECD	0.60	0.60	0.60
NRR; average wage person; no children; 13th month of unemployment; incl. SA; EC/OECD	0.11	0.11	0.15
NRR; average wage person; no children; 60th month of unemployment; incl. SA; EC/OECD	0.11	0.11	0.15
	2008	2009	2010
Unemployment benefit duration_maximum; EC/OECD	18	18	18
Unemployment benefit duration_minimum; EC/OECD	6	6	6

Estonia			
List of policy variables	Last three data points		
Monthly minimum wage (proportion of average monthly earnings, %); Eurostat	2008	2009	2010
mean	34.90	36.20	:
median	:	:	:
	2008	2009	2010
Social security and other labour costs paid by employer	:	:	:
Total tax wedge (incl.employers SSC) - Married couple, no children, 100% and 100% of AW	40.90	39.53	38.29
Total tax wedge (incl.employers SSC) - Married couple, 2 children, 100% and 100% of AW	37.72	36.36	35.00
Tax wedge, average wage person, no children; EC/OECD	38.38	39.17	40.01
Tax wedge, low wage person, no children; EC/OECD	37.03	37.75	38.58
	1998	2003	2008
Employment Protection Legislation overall; OECD	..	..	2.10
Employment Protection Legislation for regular employment; OECD	..	..	2.46
Employment Protection Legislation for temporary employment; OECD	..	..	1.75
Employment Protection Legislation for collective dismissals; OECD	..	..	3.25
	2007	2008	2009
NRR; average wage person; no children; 2nd month of unemployment; incl. SA; EC/OECD	0.54	0.54	0.53
NRR; average wage person; no children; 7th month of unemployment; incl. SA; EC/OECD	0.44	0.44	0.44
NRR; average wage person; no children; 13th month of unemployment; incl. SA; EC/OECD	0.11	0.10	0.10
NRR; average wage person; no children; 60th month of unemployment; incl. SA; EC/OECD	0.00	0.00	0.00
	2008	2009	2010
Unemployment benefit duration_maximum; EC/OECD	12	12	12
Unemployment benefit duration_minimum; EC/OECD	6	6	6

Ireland			
List of policy variables	Last three data points		
Monthly minimum wage (proportion of average monthly earnings, %); Eurostat	2008	2009	2010
mean	:	:	:
median	:	:	:
	2008	2009	2010
Social security and other labour costs paid by employer	:	:	:
Total tax wedge (incl.employers SSC) - Married couple, no children, 100% and 100% of AW	44.20	44.13	:
Total tax wedge (incl.employers SSC) - Married couple, 2 children, 100% and 100% of AW	41.05	40.84	:
Tax wedge, average wage person, no children; EC/OECD	26.82	28.98	29.35
Tax wedge, low wage person, no children; EC/OECD	20.06	22.72	23.36
	1998	2003	2008
Employment Protection Legislation overall; OECD	0.93	1.11	1.11
Employment Protection Legislation for regular employment; OECD	1.60	1.60	1.60
Employment Protection Legislation for temporary employment; OECD	0.25	0.63	0.63
Employment Protection Legislation for collective dismissals; OECD	2.38	2.38	2.38
	2007	2008	2009
NRR; average wage person; no children; 2nd month of unemployment; incl. SA; EC/OECD	0.30	0.31	0.33
NRR; average wage person; no children; 7th month of unemployment; incl. SA; EC/OECD	0.30	0.31	0.33
NRR; average wage person; no children; 13th month of unemployment; incl. SA; EC/OECD	0.30	0.31	0.34
NRR; average wage person; no children; 60th month of unemployment; incl. SA; EC/OECD	0.30	0.31	0.34
	2008	2009	2010
Unemployment benefit duration_maximum; EC/OECD	15	12	12
Unemployment benefit duration_minimum; EC/OECD	12	9	9

Greece			
List of policy variables	Last three data points		
Monthly minimum wage (proportion of average monthly earnings, %); Eurostat	2008	2009	2010
mean	50.60	45.20	47.10
median	64.40	57.50	60.00
	2008	2009	2010
Social security and other labour costs paid by employer	:	:	:
Total tax wedge (incl.employers SSC) - Married couple, no children, 100% and 100% of AW	:	:	:
Total tax wedge (incl.employers SSC) - Married couple, 2 children, 100% and 100% of AW	:	:	:
Tax wedge, average wage person, no children; EC/OECD	36.97	38.17	36.59
Tax wedge, low wage person, no children; EC/OECD	34.41	34.41	34.41
	1998	2003	2008
Employment Protection Legislation overall; OECD	3.50	2.73	2.73
Employment Protection Legislation for regular employment; OECD	2.25	2.33	2.33
Employment Protection Legislation for temporary employment; OECD	4.75	3.13	3.13
Employment Protection Legislation for collective dismissals; OECD	3.25	3.25	3.25
	2007	2008	2009
NRR; average wage person; no children; 2nd month of unemployment; incl. SA; EC/OECD	0.49	0.53	0.52
NRR; average wage person; no children; 7th month of unemployment; incl. SA; EC/OECD	0.49	0.53	0.52
NRR; average wage person; no children; 13th month of unemployment; incl. SA; EC/OECD	0.33	0.35	0.33
NRR; average wage person; no children; 60th month of unemployment; incl. SA; EC/OECD	0.00	0.00	0.00
	2008	2009	2010
Unemployment benefit duration_maximum; EC/OECD	:	:	:
Unemployment benefit duration_minimum; EC/OECD	:	:	:

Spain			
List of policy variables	Last three data points		
Monthly minimum wage (proportion of average monthly earnings, %); Eurostat	2008	2009	2010
mean	35.20	35.10	:
median	42.10	:	:
	2008	2009	2010
Social security and other labour costs paid by employer	:	27.10	:
Total tax wedge (incl.employers SSC) - Married couple, no children, 100% and 100% of AW	38.38	39.17	40.01
Total tax wedge (incl.employers SSC) - Married couple, 2 children, 100% and 100% of AW	33.96	35.93	36.76
Tax wedge, average wage person, no children; EC/OECD	37.99	38.26	39.62
Tax wedge, low wage person, no children; EC/OECD	34.05	34.35	36.35
	1998	2003	2008
Employment Protection Legislation overall; OECD	2.93	2.98	2.98
Employment Protection Legislation for regular employment; OECD	2.61	2.46	2.46
Employment Protection Legislation for temporary employment; OECD	3.25	3.50	3.50
Employment Protection Legislation for collective dismissals; OECD	3.13	3.13	3.13
	2007	2008	2009
NRR; average wage person; no children; 2nd month of unemployment; incl. SA; EC/OECD	0.62	0.61	0.60
NRR; average wage person; no children; 7th month of unemployment; incl. SA; EC/OECD	0.62	0.61	0.60
NRR; average wage person; no children; 13th month of unemployment; incl. SA; EC/OECD	0.62	0.61	0.60
NRR; average wage person; no children; 60th month of unemployment; incl. SA; EC/OECD	0.00	0.00	0.00
	2008	2009	2010
Unemployment benefit duration_maximum; EC/OECD	24	24	24
Unemployment benefit duration_minimum; EC/OECD	4	4	4

France			
List of policy variables	Last three data points		
Monthly minimum wage (proportion of average monthly earnings, %); Eurostat	2008	2009	2010
mean	46.30	:	:
median	58.90	:	:
	2008	2009	2010
Social security and other labour costs paid by employer	:	:	:
Total tax wedge (incl.employers SSC) - Married couple, no children, 100% and 100% of AW	44.42	44.33	43.95
Total tax wedge (incl.employers SSC) - Married couple, 2 children, 100% and 100% of AW	41.30	41.05	40.68
Tax wedge, average wage person, no children; EC/OECD	49.25	49.21	49.27
Tax wedge, low wage person, no children; EC/OECD	45.29	45.08	45.54
	1998	2003	2008
Employment Protection Legislation overall; OECD	2.98	3.05	3.05
Employment Protection Legislation for regular employment; OECD	2.34	2.47	2.47
Employment Protection Legislation for temporary employment; OECD	3.63	3.63	3.63
Employment Protection Legislation for collective dismissals; OECD	2.13	2.13	2.13
	2007	2008	2009
NRR; average wage person; no children; 2nd month of unemployment; incl. SA; EC/OECD	0.66	0.66	0.67
NRR; average wage person; no children; 7th month of unemployment; incl. SA; EC/OECD	0.66	0.66	0.67
NRR; average wage person; no children; 13th month of unemployment; incl. SA; EC/OECD	0.66	0.66	0.67
NRR; average wage person; no children; 60th month of unemployment; incl. SA; EC/OECD	0.32	0.34	0.34
	2008	2009	2010
Unemployment benefit duration_maximum; EC/OECD	36	36	36
Unemployment benefit duration_minimum; EC/OECD	7	4	4

Italy			
List of policy variables	Last three data points		
Monthly minimum wage (proportion of average monthly earnings, %); Eurostat	2008	2009	2010
mean	:	:	:
median	:	:	:
	2008	2009	2010
Social security and other labour costs paid by employer	:	:	:
Total tax wedge (incl.employers SSC) - Married couple, no children, 100% and 100% of AW	43.84	42.31	42.00
Total tax wedge (incl.employers SSC) - Married couple, 2 children, 100% and 100% of AW	41.11	39.61	39.31
Tax wedge, average wage person, no children; EC/OECD	46.67	46.84	46.87
Tax wedge, low wage person, no children; EC/OECD	43.28	43.53	43.61
	1998	2003	2008
Employment Protection Legislation overall; OECD	2.70	1.82	1.89
Employment Protection Legislation for regular employment; OECD	1.77	1.77	1.77
Employment Protection Legislation for temporary employment; OECD	3.63	1.88	2.00
Employment Protection Legislation for collective dismissals; OECD	4.88	4.88	4.88
	2007	2008	2009
NRR; average wage person; no children; 2nd month of unemployment; incl. SA; EC/OECD	0.62	0.59	0.59
NRR; average wage person; no children; 7th month of unemployment; incl. SA; EC/OECD	0.54	0.59	0.59
NRR; average wage person; no children; 13th month of unemployment; incl. SA; EC/OECD	0.00	0.00	0.00
NRR; average wage person; no children; 60th month of unemployment; incl. SA; EC/OECD	0.00	0.00	0.00
	2008	2009	2010
Unemployment benefit duration_maximum; EC/OECD	12	12	12
Unemployment benefit duration_minimum; EC/OECD	8	8	8

Cyprus			
List of policy variables	Last three data points		
Monthly minimum wage (proportion of average monthly earnings, %); Eurostat	2008	2009	2010
mean	:	:	:
median	:	:	:
	2008	2009	2010
Social security and other labour costs paid by employer	:	:	:
Total tax wedge (incl.employers SSC) - Married couple, no children, 100% and 100% of AW	21.73	21.93	21.96
Total tax wedge (incl.employers SSC) - Married couple, 2 children, 100% and 100% of AW	16.16	16.80	16.82
Tax wedge, average wage person, no children; EC/OECD	:	:	:
Tax wedge, low wage person, no children; EC/OECD	:	:	:
	1998	2003	2008
Employment Protection Legislation overall; OECD	:	:	:
Employment Protection Legislation for regular employment; OECD	:	:	:
Employment Protection Legislation for temporary employment; OECD	:	:	:
Employment Protection Legislation for collective dismissals; OECD	:	:	:
	2007	2008	2009
NRR; average wage person; no children; 2nd month of unemployment; incl. SA; EC/OECD	0.58	:	:
NRR; average wage person; no children; 7th month of unemployment; incl. SA; EC/OECD	0.00	:	:
NRR; average wage person; no children; 13th month of unemployment; incl. SA; EC/OECD	0.00	:	:
NRR; average wage person; no children; 60th month of unemployment; incl. SA; EC/OECD	0.00	:	:
	2008	2009	2010
Unemployment benefit duration_maximum; EC/OECD	5	5	5
Unemployment benefit duration_minimum; EC/OECD	5	5	5

Latvia			
List of policy variables	Last three data points		
Monthly minimum wage (proportion of average monthly earnings, %); Eurostat	2008	2009	2010
mean	36.20	40.90	42.20
median	:	:	:
	2008	2009	2010
Social security and other labour costs paid by employer	:	:	:
Total tax wedge (incl.employers SSC) - Married couple, no children, 100% and 100% of AW	54.10	53.09	46.44
Total tax wedge (incl.employers SSC) - Married couple, 2 children, 100% and 100% of AW	49.02	48.15	41.36
Tax wedge, average wage person, no children; EC/OECD	:	:	:
Tax wedge, low wage person, no children; EC/OECD	:	:	:
	1998	2003	2008
Employment Protection Legislation overall; OECD	:	:	:
Employment Protection Legislation for regular employment; OECD	:	:	:
Employment Protection Legislation for temporary employment; OECD	:	:	:
Employment Protection Legislation for collective dismissals; OECD	:	:	:
	2007	2008	2009
NRR; average wage person; no children; 2nd month of unemployment; incl. SA; EC/OECD	0.84	0.83	0.84
NRR; average wage person; no children; 7th month of unemployment; incl. SA; EC/OECD	0.42	0.41	0.42
NRR; average wage person; no children; 13th month of unemployment; incl. SA; EC/OECD	0.23	0.23	0.26
NRR; average wage person; no children; 60th month of unemployment; incl. SA; EC/OECD	0.23	0.23	0.26
	2008	2009	2010
Unemployment benefit duration_maximum; EC/OECD	9	9	9
Unemployment benefit duration_minimum; EC/OECD	4	9	9

Lithuania			
List of policy variables	Last three data points		
Monthly minimum wage (proportion of average monthly earnings, %); Eurostat	2008	2009	2010
mean	39.60	40.50	:
median	:	:	:
	2008	2009	2010
Social security and other labour costs paid by employer	:	:	:
Total tax wedge (incl.employers SSC) - Married couple, no children, 100% and 100% of AW	49.25	49.21	49.27
Total tax wedge (incl.employers SSC) - Married couple, 2 children, 100% and 100% of AW	46.34	46.22	46.36
Tax wedge, average wage person, no children; EC/OECD	:	:	:
Tax wedge, low wage person, no children; EC/OECD	:	:	:
	1998	2003	2008
Employment Protection Legislation overall; OECD	:	:	:
Employment Protection Legislation for regular employment; OECD	:	:	:
Employment Protection Legislation for temporary employment; OECD	:	:	:
Employment Protection Legislation for collective dismissals; OECD	:	:	:
	2007	2008	2009
NRR; average wage person; no children; 2nd month of unemployment; incl. SA; EC/OECD	0.69	0.61	0.68
NRR; average wage person; no children; 7th month of unemployment; incl. SA; EC/OECD	0.00	0.00	0.00
NRR; average wage person; no children; 13th month of unemployment; incl. SA; EC/OECD	0.00	0.00	0.00
NRR; average wage person; no children; 60th month of unemployment; incl. SA; EC/OECD	0.00	0.00	0.00
	2008	2009	2010
Unemployment benefit duration_maximum; EC/OECD	9	9	9
Unemployment benefit duration_minimum; EC/OECD	6	6	6

Luxembourg			
List of policy variables	Last three data points		
Monthly minimum wage (proportion of average monthly earnings, %); Eurostat	2008	2009	2010
mean	:	45.40	45.90
median	:	56.30	56.80
	2008	2009	2010
Social security and other labour costs paid by employer	:	:	:
Total tax wedge (incl.employers SSC) - Married couple, no children, 100% and 100% of AW	38.34	39.32	37.51
Total tax wedge (incl.employers SSC) - Married couple, 2 children, 100% and 100% of AW	38.44	39.40	37.56
Tax wedge, average wage person, no children; EC/OECD	34.66	33.83	34.01
Tax wedge, low wage person, no children; EC/OECD	28.18	27.34	27.46
	1998	2003	2008
Employment Protection Legislation overall; OECD	..	..	3.25
Employment Protection Legislation for regular employment; OECD	..	..	2.75
Employment Protection Legislation for temporary employment; OECD	..	..	3.75
Employment Protection Legislation for collective dismissals; OECD	..	..	3.88
	2007	2008	2009
NRR; average wage person; no children; 2nd month of unemployment; incl. SA; EC/OECD	0.85	0.85	0.84
NRR; average wage person; no children; 7th month of unemployment; incl. SA; EC/OECD	0.85	0.85	0.84
NRR; average wage person; no children; 13th month of unemployment; incl. SA; EC/OECD	0.00	0.00	0.00
NRR; average wage person; no children; 60th month of unemployment; incl. SA; EC/OECD	0.00	0.00	0.00
	2008	2009	2010
Unemployment benefit duration_maximum; EC/OECD	12	12	12
Unemployment benefit duration_minimum; EC/OECD	12	12	12

Hungary			
List of policy variables	Last three data points		
Monthly minimum wage (proportion of average monthly earnings, %); Eurostat	2008	2009	2010
mean	:	38.60	:
median	:	:	:
	2008	2009	2010
Social security and other labour costs paid by employer	:	:	:
Total tax wedge (incl.employers SSC) - Married couple, no children, 100% and 100% of AW	44.23	44.15	:
Total tax wedge (incl.employers SSC) - Married couple, 2 children, 100% and 100% of AW	41.07	40.85	:
Tax wedge, average wage person, no children; EC/OECD	54.10	53.09	46.44
Tax wedge, low wage person, no children; EC/OECD	46.70	46.16	43.56
	1998	2003	2008
Employment Protection Legislation overall; OECD	1.27	1.52	1.65
Employment Protection Legislation for regular employment; OECD	1.92	1.92	1.92
Employment Protection Legislation for temporary employment; OECD	0.63	1.13	1.38
Employment Protection Legislation for collective dismissals; OECD	2.88	2.88	2.88
	2007	2008	2009
NRR; average wage person; no children; 2nd month of unemployment; incl. SA; EC/OECD	0.63	0.59	0.58
NRR; average wage person; no children; 7th month of unemployment; incl. SA; EC/OECD	0.35	0.33	0.33
NRR; average wage person; no children; 13th month of unemployment; incl. SA; EC/OECD	0.02	0.02	0.02
NRR; average wage person; no children; 60th month of unemployment; incl. SA; EC/OECD	0.02	0.02	0.02
	2008	2009	2010
Unemployment benefit duration_maximum; EC/OECD	9	9	9
Unemployment benefit duration_minimum; EC/OECD	9	9	9

Malta			
List of policy variables	Last three data points		
Monthly minimum wage (proportion of average monthly earnings, %); Eurostat	2008	2009	2010
mean	48.80	45.20	45.40
median	56.30	53.50	52.40
	2008	2009	2010
Social security and other labour costs paid by employer	14.00	13.90	:
Total tax wedge (incl.employers SSC) - Married couple, no children, 100% and 100% of AW	26.82	28.98	29.35
Total tax wedge (incl.employers SSC) - Married couple, 2 children, 100% and 100% of AW	22.42	24.52	25.24
Tax wedge, average wage person, no children; EC/OECD	:	:	:
Tax wedge, low wage person, no children; EC/OECD	:	:	:
	1998	2003	2008
Employment Protection Legislation overall; OECD	:	:	:
Employment Protection Legislation for regular employment; OECD	:	:	:
Employment Protection Legislation for temporary employment; OECD	:	:	:
Employment Protection Legislation for collective dismissals; OECD	:	:	:
	2007	2008	2009
NRR; average wage person; no children; 2nd month of unemployment; incl. SA; EC/OECD	0.37	0.36	0.36
NRR; average wage person; no children; 7th month of unemployment; incl. SA; EC/OECD	0.45	0.41	0.42
NRR; average wage person; no children; 13th month of unemployment; incl. SA; EC/OECD	0.45	0.41	0.42
NRR; average wage person; no children; 60th month of unemployment; incl. SA; EC/OECD	0.45	0.41	0.42
	2008	2009	2010
Unemployment benefit duration_maximum; EC/OECD	5	5	5
Unemployment benefit duration_minimum; EC/OECD	5	5	5

Netherlands			
List of policy variables	Last three data points		
Monthly minimum wage (proportion of average monthly earnings, %); Eurostat	2008	2009	2010
mean	44.20	44.10	:
median	51.70	51.40	:
	2008	2009	2010
Social security and other labour costs paid by employer	:	:	:
Total tax wedge (incl.employers SSC) - Married couple, no children, 100% and 100% of AW	46.67	46.84	46.87
Total tax wedge (incl.employers SSC) - Married couple, 2 children, 100% and 100% of AW	44.06	44.30	44.35
Tax wedge, average wage person, no children; EC/OECD	39.17	37.99	38.42
Tax wedge, low wage person, no children; EC/OECD	34.02	33.19	33.68
	1998	2003	2008
Employment Protection Legislation overall; OECD	2.73	2.12	1.95
Employment Protection Legislation for regular employment; OECD	3.08	3.05	2.72
Employment Protection Legislation for temporary employment; OECD	2.38	1.19	1.19
Employment Protection Legislation for collective dismissals; OECD	3.00	3.00	3.00
	2007	2008	2009
NRR; average wage person; no children; 2nd month of unemployment; incl. SA; EC/OECD	0.74	0.74	0.74
NRR; average wage person; no children; 7th month of unemployment; incl. SA; EC/OECD	0.70	0.70	0.70
NRR; average wage person; no children; 13th month of unemployment; incl. SA; EC/OECD	0.70	0.70	0.70
NRR; average wage person; no children; 60th month of unemployment; incl. SA; EC/OECD	0.14	0.14	0.14
	2008	2009	2010
Unemployment benefit duration_maximum; EC/OECD	38	38	38
Unemployment benefit duration_minimum; EC/OECD	3	3	3

Austria			
List of policy variables	Last three data points		
Monthly minimum wage (proportion of average monthly earnings, %); Eurostat	2008	2009	2010
mean	:	:	:
median	:	:	:
	2008	2009	2010
Social security and other labour costs paid by employer	:	:	:
Total tax wedge (incl.employers SSC) - Married couple, no children, 100% and 100% of AW	48.83	47.83	47.91
Total tax wedge (incl.employers SSC) - Married couple, 2 children, 100% and 100% of AW	44.33	42.73	42.86
Tax wedge, average wage person, no children; EC/OECD	48.83	47.83	47.91
Tax wedge, low wage person, no children; EC/OECD	44.42	43.22	43.32
	1998	2003	2008
Employment Protection Legislation overall; OECD	2.21	1.93	1.93
Employment Protection Legislation for regular employment; OECD	2.92	2.37	2.37
Employment Protection Legislation for temporary employment; OECD	1.50	1.50	1.50
Employment Protection Legislation for collective dismissals; OECD	3.25	3.25	3.25
	2007	2008	2009
NRR; average wage person; no children; 2nd month of unemployment; incl. SA; EC/OECD	0.55	0.55	0.55
NRR; average wage person; no children; 7th month of unemployment; incl. SA; EC/OECD	0.55	0.55	0.55
NRR; average wage person; no children; 13th month of unemployment; incl. SA; EC/OECD	0.51	0.51	0.51
NRR; average wage person; no children; 60th month of unemployment; incl. SA; EC/OECD	0.51	0.51	0.51
	2008	2009	2010
Unemployment benefit duration_maximum; EC/OECD	12	12	12
Unemployment benefit duration_minimum; EC/OECD	5	5	5

Poland			
List of policy variables	Last three data points		
Monthly minimum wage (proportion of average monthly earnings, %); Eurostat	2008	2009	2010
mean	35.70	39.70	:
median	:	:	:
	2008	2009	2010
Social security and other labour costs paid by employer	:	:	:
Total tax wedge (incl.employers SSC) - Married couple, no children, 100% and 100% of AW	:	:	:
Total tax wedge (incl.employers SSC) - Married couple, 2 children, 100% and 100% of AW	:	:	:
Tax wedge, average wage person, no children; EC/OECD	34.69	34.15	34.27
Tax wedge, low wage person, no children; EC/OECD	33.61	33.17	33.35
	1998	2003	2008
Employment Protection Legislation overall; OECD	1.40	1.65	1.90
Employment Protection Legislation for regular employment; OECD	2.06	2.06	2.06
Employment Protection Legislation for temporary employment; OECD	0.75	1.25	1.75
Employment Protection Legislation for collective dismissals; OECD	4.13	4.13	3.63
	2007	2008	2009
NRR; average wage person; no children; 2nd month of unemployment; incl. SA; EC/OECD	0.47	0.46	0.45
NRR; average wage person; no children; 7th month of unemployment; incl. SA; EC/OECD	0.47	0.46	0.45
NRR; average wage person; no children; 13th month of unemployment; incl. SA; EC/OECD	0.22	0.22	0.21
NRR; average wage person; no children; 60th month of unemployment; incl. SA; EC/OECD	0.22	0.22	0.21
	2008	2009	2010
Unemployment benefit duration_maximum; EC/OECD	18	18	12
Unemployment benefit duration_minimum; EC/OECD	6	6	6

Portugal			
List of policy variables	Last three data points		
Monthly minimum wage (proportion of average monthly earnings, %); Eurostat	2008	2009	2010
mean	44.60	43.20	42.80
median	:	58.30	:
	2008	2009	2010
Social security and other labour costs paid by employer	27.90	28.30	:
Total tax wedge (incl.employers SSC) - Married couple, no children, 100% and 100% of AW	41.61	40.73	:
Total tax wedge (incl.employers SSC) - Married couple, 2 children, 100% and 100% of AW	39.47	37.87	:
Tax wedge, average wage person, no children; EC/OECD	37.62	37.47	37.73
Tax wedge, low wage person, no children; EC/OECD	32.90	32.67	32.83
	1998	2003	2008
Employment Protection Legislation overall; OECD	3.67	3.67	3.15
Employment Protection Legislation for regular employment; OECD	4.33	4.33	4.17
Employment Protection Legislation for temporary employment; OECD	3.00	3.00	2.13
Employment Protection Legislation for collective dismissals; OECD	2.88	2.88	1.88
	2007	2008	2009
NRR; average wage person; no children; 2nd month of unemployment; incl. SA; EC/OECD	0.84	0.84	0.84
NRR; average wage person; no children; 7th month of unemployment; incl. SA; EC/OECD	0.84	0.84	0.84
NRR; average wage person; no children; 13th month of unemployment; incl. SA; EC/OECD	0.84	0.84	0.84
NRR; average wage person; no children; 60th month of unemployment; incl. SA; EC/OECD	0.00	0.00	0.00
	2008	2009	2010
Unemployment benefit duration_maximum; EC/OECD	38	38	38
Unemployment benefit duration_minimum; EC/OECD	9	9	9

Romania			
List of policy variables	Last three data points		
Monthly minimum wage (proportion of average monthly earnings, %); Eurostat	2008	2009	2010
mean	30.10	33.30	:
median	:	:	:
	2008	2009	2010
Social security and other labour costs paid by employer	:	:	:
Total tax wedge (incl.employers SSC) - Married couple, no children, 100% and 100% of AW	33.00	32.24	32.42
Total tax wedge (incl.employers SSC) - Married couple, 2 children, 100% and 100% of AW	25.80	25.23	25.47
Tax wedge, average wage person, no children; EC/OECD	:	:	:
Tax wedge, low wage person, no children; EC/OECD	:	:	:
	1998	2003	2008
Employment Protection Legislation overall; OECD	:	:	:
Employment Protection Legislation for regular employment; OECD	:	:	:
Employment Protection Legislation for temporary employment; OECD	:	:	:
Employment Protection Legislation for collective dismissals; OECD	:	:	:
	2007	2008	2009
NRR; average wage person; no children; 2nd month of unemployment; incl. SA; EC/OECD	:	0.42	0.48
NRR; average wage person; no children; 7th month of unemployment; incl. SA; EC/OECD	:	0.42	0.48
NRR; average wage person; no children; 13th month of unemployment; incl. SA; EC/OECD	:	0.00	0.00
NRR; average wage person; no children; 60th month of unemployment; incl. SA; EC/OECD	:	0.00	0.00
	2008	2009	2010
Unemployment benefit duration_maximum; EC/OECD	12	15	12
Unemployment benefit duration_minimum; EC/OECD	6	9	6

Slovenia			
List of policy variables	Last three data points		
Monthly minimum wage (proportion of average monthly earnings, %); Eurostat	2008	2009	2010
mean	41.00	41.10	47.70
median	:	:	:
	2008	2009	2010
Social security and other labour costs paid by employer	:	:	:
Total tax wedge (incl.employers SSC) - Married couple, no children, 100% and 100% of AW	22.77	22.28	:
Total tax wedge (incl.employers SSC) - Married couple, 2 children, 100% and 100% of AW	21.38	20.92	:
Tax wedge, average wage person, no children; EC/OECD	42.88	42.24	42.35
Tax wedge, low wage person, no children; EC/OECD	40.32	39.72	38.46
	1998	2003	2008
Employment Protection Legislation overall; OECD	..	..	2.51
Employment Protection Legislation for regular employment; OECD	..	..	3.15
Employment Protection Legislation for temporary employment; OECD	..	..	1.88
Employment Protection Legislation for collective dismissals; OECD	..	..	2.88
	2007	2008	2009
NRR; average wage person; no children; 2nd month of unemployment; incl. SA; EC/OECD	0.62	0.64	0.65
NRR; average wage person; no children; 7th month of unemployment; incl. SA; EC/OECD	0.62	0.64	0.65
NRR; average wage person; no children; 13th month of unemployment; incl. SA; EC/OECD	0.08	0.08	0.08
NRR; average wage person; no children; 60th month of unemployment; incl. SA; EC/OECD	0.08	0.08	0.08
	2008	2009	2010
Unemployment benefit duration_maximum; EC/OECD	24	24	24
Unemployment benefit duration_minimum; EC/OECD	3	3	3

Slovak Republic			
List of policy variables	Last three data points		
Monthly minimum wage (proportion of average monthly earnings, %); Eurostat	2008	2009	2010
mean	34.70	36.50	:
median	43.80	46.10	:
	2008	2009	2010
Social security and other labour costs paid by employer	22.50	:	:
Total tax wedge (incl.employers SSC) - Married couple, no children, 100% and 100% of AW	38.84	37.99	39.17
Total tax wedge (incl.employers SSC) - Married couple, 2 children, 100% and 100% of AW	35.88	34.23	36.30
Tax wedge, average wage person, no children; EC/OECD	38.84	37.72	37.79
Tax wedge, low wage person, no children; EC/OECD	36.05	34.36	34.48
	1998	2003	2008
Employment Protection Legislation overall; OECD	1.80	1.34	1.44
Employment Protection Legislation for regular employment; OECD	2.47	2.31	2.50
Employment Protection Legislation for temporary employment; OECD	1.13	0.38	0.38
Employment Protection Legislation for collective dismissals; OECD	4.00	3.75	3.75
	2007	2008	2009
NRR; average wage person; no children; 2nd month of unemployment; incl. SA; EC/OECD	0.64	0.65	0.64
NRR; average wage person; no children; 7th month of unemployment; incl. SA; EC/OECD	0.00	0.00	0.00
NRR; average wage person; no children; 13th month of unemployment; incl. SA; EC/OECD	0.00	0.00	0.00
NRR; average wage person; no children; 60th month of unemployment; incl. SA; EC/OECD	0.00	0.00	0.00
	2008	2009	2010
Unemployment benefit duration_maximum; EC/OECD	6	6	6
Unemployment benefit duration_minimum; EC/OECD	4	4	4

Finland			
List of policy variables	Last three data points		
Monthly minimum wage (proportion of average monthly earnings, %); Eurostat	2008	2009	2010
mean	:	:	:
median	:	:	:
	2008	2009	2010
Social security and other labour costs paid by employer	26.30	26.70	:
Total tax wedge (incl.employers SSC) - Married couple, no children, 100% and 100% of AW	37.99	38.26	39.62
Total tax wedge (incl.employers SSC) - Married couple, 2 children, 100% and 100% of AW	36.45	36.78	38.16
Tax wedge, average wage person, no children; EC/OECD	43.84	42.31	42.00
Tax wedge, low wage person, no children; EC/OECD	38.59	36.87	36.33
	1998	2003	2008
Employment Protection Legislation overall; OECD	2.09	2.02	1.96
Employment Protection Legislation for regular employment; OECD	2.31	2.17	2.17
Employment Protection Legislation for temporary employment; OECD	1.88	1.88	1.75
Employment Protection Legislation for collective dismissals; OECD	2.63	2.63	2.38
	2007	2008	2009
NRR; average wage person; no children; 2nd month of unemployment; incl. SA; EC/OECD	0.51	0.51	0.52
NRR; average wage person; no children; 7th month of unemployment; incl. SA; EC/OECD	0.51	0.51	0.52
NRR; average wage person; no children; 13th month of unemployment; incl. SA; EC/OECD	0.51	0.51	0.52
NRR; average wage person; no children; 60th month of unemployment; incl. SA; EC/OECD	0.36	0.35	0.35
	2008	2009	2010
Unemployment benefit duration_maximum; EC/OECD	23	23	23
Unemployment benefit duration_minimum; EC/OECD	23	23	23

Sweden			
List of policy variables	Last three data points		
Monthly minimum wage (proportion of average monthly earnings, %); Eurostat	2008	2009	2010
mean	:	:	:
median	:	:	:
	2008	2009	2010
Social security and other labour costs paid by employer	20.90	21.50	:
Total tax wedge (incl.employers SSC) - Married couple, no children, 100% and 100% of AW	41.61	55.74	:
Total tax wedge (incl.employers SSC) - Married couple, 2 children, 100% and 100% of AW	37.74	52.89	:
Tax wedge, average wage person, no children; EC/OECD	44.81	43.23	42.70
Tax wedge, low wage person, no children; EC/OECD	42.54	41.29	40.60
	1998	2003	2008
Employment Protection Legislation overall; OECD	2.24	2.24	1.87
Employment Protection Legislation for regular employment; OECD	2.86	2.86	2.86
Employment Protection Legislation for temporary employment; OECD	1.63	1.63	0.88
Employment Protection Legislation for collective dismissals; OECD	3.75	3.75	3.75
	2007	2008	2009
NRR; average wage person; no children; 2nd month of unemployment; incl. SA; EC/OECD	0.53	0.50	0.48
NRR; average wage person; no children; 7th month of unemployment; incl. SA; EC/OECD	0.53	0.50	0.48
NRR; average wage person; no children; 13th month of unemployment; incl. SA; EC/OECD	0.53	0.50	0.48
NRR; average wage person; no children; 60th month of unemployment; incl. SA; EC/OECD	0.00	0.00	0.00
	2008	2009	2010
Unemployment benefit duration_maximum; EC/OECD	21	21	21
Unemployment benefit duration_minimum; EC/OECD	14	14	14

United Kingdom			
List of policy variables	Last three data points		
Monthly minimum wage (proportion of average monthly earnings, %); Eurostat	2008	2009	2010
mean	38.10	38.40	38.20
median	47.30	47.20	47.20
	2008	2009	2010
Social security and other labour costs paid by employer	:	:	:
Total tax wedge (incl.employers SSC) - Married couple, no children, 100% and 100% of AW	37.54	36.87	36.83
Total tax wedge (incl.employers SSC) - Married couple, 2 children, 100% and 100% of AW	35.21	34.54	34.57
Tax wedge, average wage person, no children; EC/OECD	32.78	32.51	32.75
Tax wedge, low wage person, no children; EC/OECD	29.67	29.26	29.62
	1998	2003	2008
Employment Protection Legislation overall; OECD	0.60	0.75	0.75
Employment Protection Legislation for regular employment; OECD	0.95	1.12	1.12
Employment Protection Legislation for temporary employment; OECD	0.25	0.38	0.38
Employment Protection Legislation for collective dismissals; OECD	2.88	2.88	2.88
	2007	2008	2009
NRR; average wage person; no children; 2nd month of unemployment; incl. SA; EC/OECD	0.40	0.38	0.38
NRR; average wage person; no children; 7th month of unemployment; incl. SA; EC/OECD	0.40	0.38	0.38
NRR; average wage person; no children; 13th month of unemployment; incl. SA; EC/OECD	0.40	0.38	0.38
NRR; average wage person; no children; 60th month of unemployment; incl. SA; EC/OECD	0.40	0.38	0.38
	2008	2009	2010
Unemployment benefit duration_maximum; EC/OECD	6	6	6
Unemployment benefit duration_minimum; EC/OECD	6	6	6

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