Key Features ([1])

1. Introduction

This chapter describes the macroeconomic, labour market and social developments in recent years, with a particular focus on the gradual labour market recovery and the social developments observed since 2013. The analysis also acknowledges the role of key structural changes such as population ageing that will have a significant impact on Europe's labour markets and social protection systems in the coming years.

The impact of the crisis has differed widely across Member States. Despite some signs of convergence since 2013 – with a reduction in unemployment rates and an increase in employment in the countries that have been hit hardest by the recent crisis – differences remain and are now much larger than they were in 2008. In some countries, income inequalities and poverty have also increased significantly, despite the recent stabilisation or even improvement in the general economic and labour market situation.

Challenges remain. While improved, the economic outlook remains moderate and investment levels are significantly lower than on the eve of the crisis, with large disparities across Member States. Employment growth has been gradual but faster than the relatively weak economic growth would suggest. A stronger economic recovery based on stronger physical and human capital investment is therefore necessary to sustain labour market recovery.

While there are signs of economic recovery in all Member States, unemployment rates remain particularly high in some, with differences in both employment and unemployment rates now much greater than before the crisis. This divergence does not only result from asymmetries in the size and nature of the initial economic shocks but also from the uneven capacity of Member States' economies and institutions to absorb the shocks and limits their impact on labour markets and people's incomes.

Restoring convergence will depend on improving the resilience of the most vulnerable economies, notably by removing obstacles to growth and job creation and by strengthening labour market and welfare institutions. This is particularly important in EMU countries, where monetary and fiscal adjustment mechanisms are not available or limited. In this context, the 2016 Annual Growth Survey (AGS) ([2]) sets out what more can be done at EU level to help Member States support growth, reinforce economic convergence, create jobs and strengthen social fairness. The Commission proposes to pursue an integrated approach to economic policy built around: boosting investment, accelerating structural reforms and pursuing responsible growth-friendly fiscal consolidation.

2. Economic recovery is firming up, but growth remains moderate and in need of higher investment

Following more than a decade of real average annual GDP growth rates of over 2%, the EU experienced a double-dip recession in both 2009 and 2012 (**Chart 1** and **Table 1**) before the first signs of recovery in 2013. The recession was deeper and longer for the euro area (EA) with real annual GDP growth in the EA still negative in 2013. Since the beginning of 2014, the economic recovery has strengthened in both the EU and the EA, although at a modest pace, with real annual GDP growth reaching 1.9% in the EU and 1.5% in the EA between the second

([1]) By Ana Xavier and Isabelle Maquet with the contributions of Magda Grzegorzewska, David Arranz and Eric Meyermans.

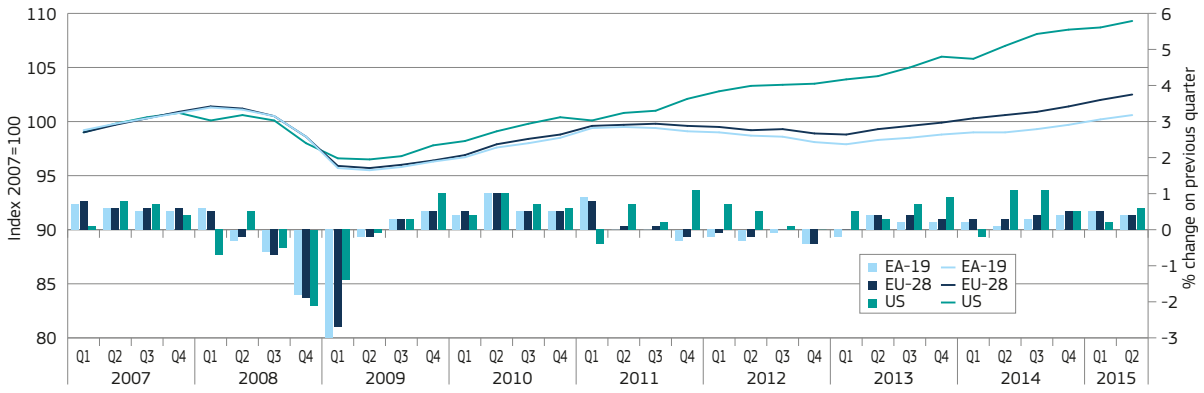
([2]) See http://ec.europa.eu/europe2020/making-it-happen/annual-growth-surveys/index_en.htm.

quarter of 2014 and the second quarter of 2015. As a result, GDP in the EU and in the EA has now recovered to 2008 levels (**Chart 1**). In contrast, GDP growth in the United States over this period has been considerably stronger than in the EU or EA. As a result, GDP in the United States is now well above its pre-crisis level (**Chart 1**).

In the year to the second quarter of 2015, real GDP growth increased in virtually all Member States (**Chart 2**).

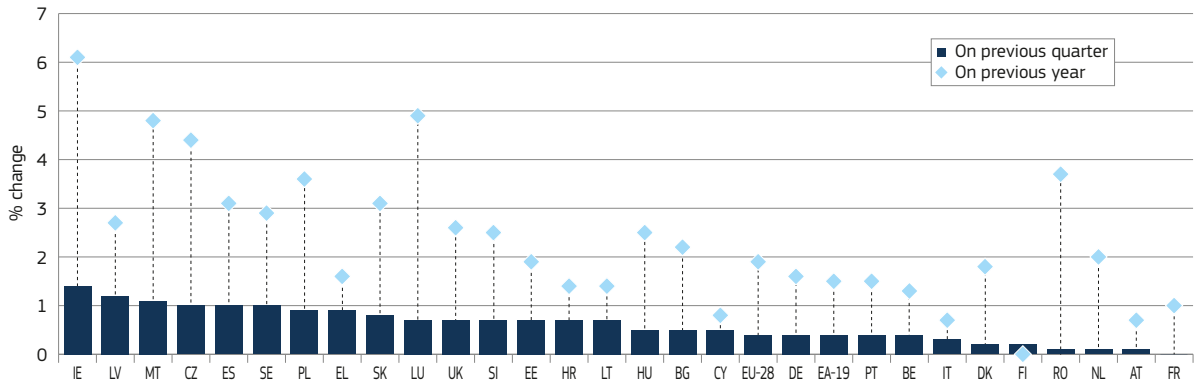
After remaining just above 2 % in the EU and EA between 2000 and 2007, inflation dropped to very low levels, between 0 % and 1 %, during the crisis (**Chart 3**), though it now appears to be increasing.

Chart 1: Real GDP - EU, EA and US, 2007-2015, index 2007=100



Source: Eurostat, National Accounts, data seasonally adjusted [namq_gdp_k].

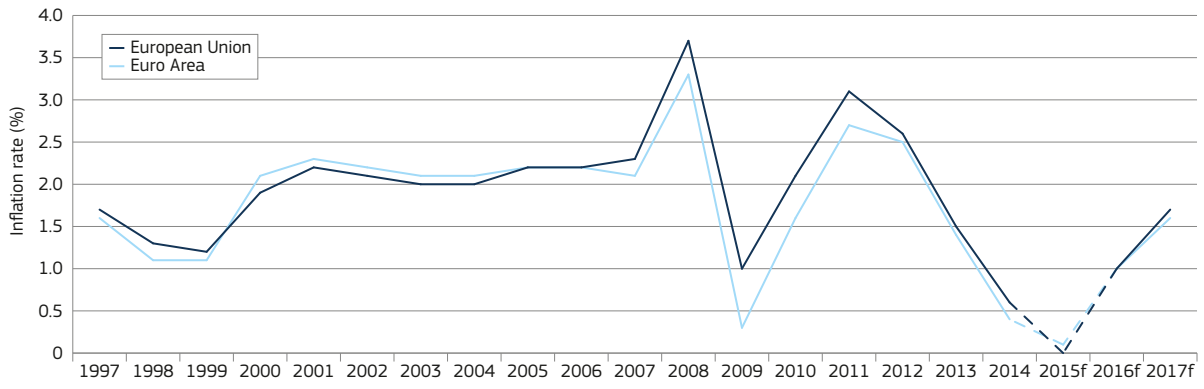
Chart 2: Real GDP growth - EU, EA and Member States, 2015Q2



Source: Eurostat, National Accounts, data seasonally adjusted [namq_10_gdp].

Note: EE MT: ESTAT News release; IE LU: 2015Q1.

Chart 3: Inflation rate based on the Harmonised consumer price index, 2005=100



Source: Eurostat and Commission services AMECO (forecast).

Note: 2015, 2016 and 2017 are forecast values.

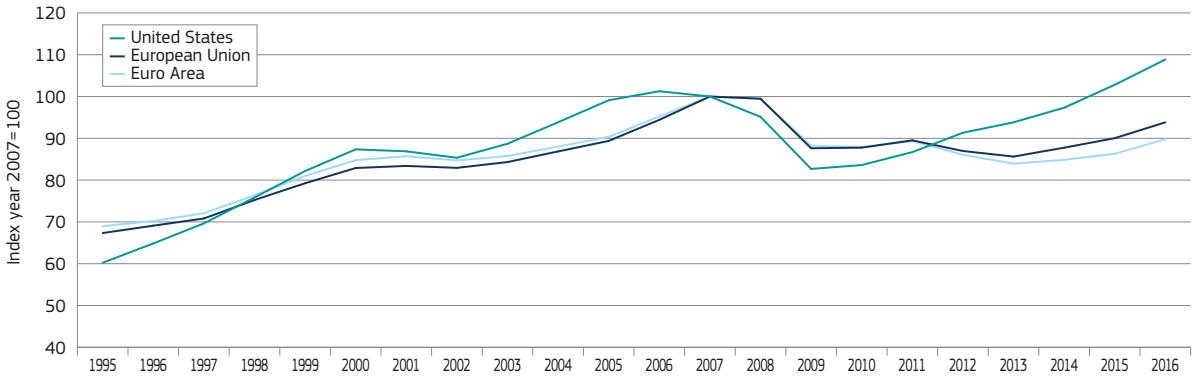
Table 1: Real GDP growth (annual) for the EU and EA, 1994-2016: Real GDP growth (annual) for the EU and EA, 1994-2017

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Growth real GDP EU	NA	NA	1.9%	2.7%	3.0%	3.0%	3.9%	2.2%	1.3%	1.5%	2.5%	2.0%	3.4%	3.1%	0.5%	-4.4%	2.1%	1.7%	-0.5%	0.04%	1.4%	1.9%	2.0%	2.1%
Growth real GDP EA	2.5%	2.4%	1.6%	2.6%	2.9%	2.9%	3.8%	2.1%	0.9%	0.7%	2.2%	1.7%	3.3%	3.1%	0.5%	-4.5%	2.0%	1.6%	-0.8%	-0.4%	0.9%	1.6%	1.8%	1.9%

Source: Commission services, AMECO.

Note: 2015, 2016 and 2017 are forecast values.

Chart 4: Real gross fixed capital formation for the EU, EA and US (index year 2007 = 100)



Source: Commission services, AMECO.

Note: 2015 and 2016 are forecast values

The economic recovery is now in its third year with the 2015-2017 economic outlook showing a continuous though moderate recovery ahead (Table 1). Real annual GDP growth is expected to reach 1.9% in 2015, 2.0% in 2016 and 2.1% in 2017 in the EU (European Economic Forecast, autumn 2015) ([3]). For the EA, real annual GDP growth is expected to reach 1.6% in 2015, 1.8% in 2016 and 1.9% in 2017. Annual inflation (the rise in consumer prices) is expected to rise from 0% in the EU in 2015 to 1.1% in 2016 and 1.6% in 2017. In the EA, it is expected to increase from 0.1% in 2015, to 1% in 2016 and 1.6% in 2017 (Chart 3).

Three main elements have created a more favourable environment for growth so far: a) decreasing oil prices that should reduce production costs and free up consumer spending for other purchases; b) the depreciation of the euro that should benefit EA exports; and c) an accommodating monetary policy (quantitative easing) that should counteract the very low levels of inflation and the disinflation trends observed in some countries. As the impact of some of these factors appears to be fading with the slowdown in emerging economies and global trade, and in a context of geopolitical tensions, the gradual recovery in employment, the resulting increase in disposable household income, easier access to credit, progress in financial deleveraging and higher investment may contribute to increasing domestic demand and support economic growth. The implementation of structural reforms in recent years, including in countries hit hardest by the crisis, may also support growth further.

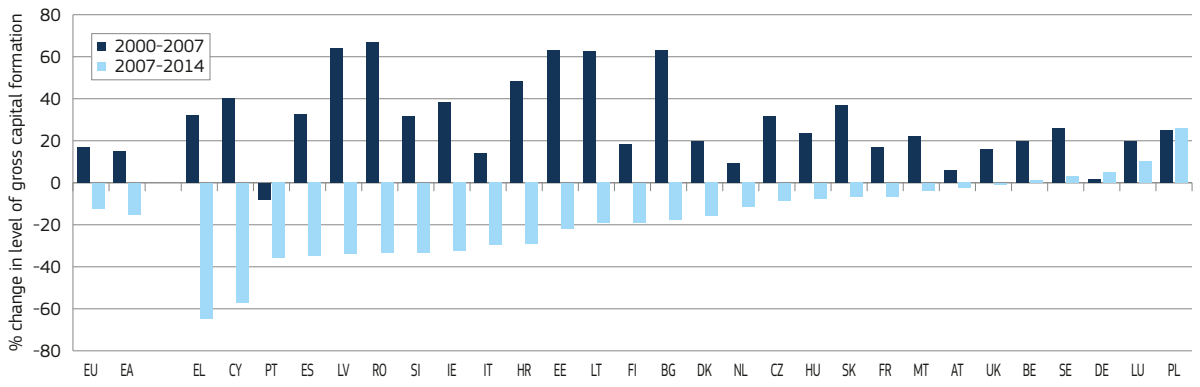
As the EU and EA economy remains on a recovery course, current real GDP growth continues to be weaker than before the crisis and improvements are unevenly spread, with GDP growth rates uneven across EU Member States and unstable or even negative in some (**Chart 2**). The forecast growth for 2015, 2016 and 2017 remains moderate (Table 1) and in the EA convergence is not happening fast enough. Low levels of investment (see below), combined with persistent and very high levels of private and public debt and moderate economic growth prospects in the EU and EA, may, in turn, limit the labour market recovery in the near future. In the EU, employment is expected to grow by 1% in 2015, 0.9% in 2016 and 0.9% in 2017 (0.9%, 0.9% and 1% respectively for the EA), while unemployment is due to continue declining slowly and with substantial disparities across Member States. The unemployment rate is expected to fall from 9.5% in 2015 to 9.2% and 8.9% in 2016 and 2017, respectively.

While levels of GDP and private consumption in the EU-28 are roughly back to pre-crisis levels, investment levels in 2014 were more than 12% below their 2007 peak (**Chart 4**). Following several years of investment growth, real gross fixed capital formation ([4]) dropped by more than EUR 420 billion in real terms (in 2010 prices) between 2007 and 2013. In 2014, investment in the EU

([3]) See http://ec.europa.eu/economy_finance/eu/forecasts/2015_autumn_forecast_en.htm.

([4]) Fixed capital is defined as the set of assets such as Property, Plant and Equipment used in the productive process and that a firm holds for over a year. For example, if a firm builds a new factory or invests in new machines, this will be an accumulation of fixed capital. Gross fixed capital formation (net investment) is the net amount of fixed capital accumulation. Gross fixed capital formation is included in the expenditure approach to national income accounting. Real here stands for constant prices.

Chart 5: Real gross fixed capital formation for EU Member States (% change between 2000 and 2007, and 2007 and 2014)



Source: Commission services, AMECO.

Note: 2015 and 2016 are forecast values.

recovered slightly, by about EUR 62 billion (2010 prices), but remained significantly below the 2007 levels. In the EA, gross fixed capital formation followed a similar path and in 2014 was still 15% below the peak levels of 2007. In comparison, investment in the United States in 2014 was broadly back to its 2006/2007 level due in large part to developments in the energy sector.

In certain Member States, the decline in investment has been dramatic. In 2014, only a few countries (Belgium, Germany, Luxembourg, Poland, Sweden and the United Kingdom) were around or above their 2007 levels, while in others (Ireland, Greece, Spain, Cyprus, Latvia, Portugal, Romania and Slovenia) real gross fixed capital formation had declined by 30% or more compared to 2007 (**Chart 5**).

Such low investment is associated with low investor confidence, low demand, difficulties in accessing credit, and increased aversion to risk by investors ([5]). Weak investment slows down economic recovery in the short term and, in the longer term, holds back employment levels and job creation as well as productivity and growth.

Since the crisis, investment has evolved differently across countries. According to the Commission 2015 autumn forecast, investment is set to accelerate but the recovery might remain subdued in view of, inter alia, weak demand, corporate deleveraging or policy uncertainty, depending on the countries. Indeed, the factors that influence investment - including macroeconomic ones, and/or the extent to which they do influence investment, are country specific.

For instance, in some countries, investment has been relatively resilient, but there are different patterns in terms of levels and composition of investment. In some other countries that were heavily hit by the crisis, both private and public investments collapsed with the crisis. This generally reflected a rapid downward adjustment of the housing and corporate capital stock that followed the investment boom that occurred before the crisis without a corresponding boost in terms of total factor productivity. Despite a recent recovery in investment, limited fiscal space, debt overhang in the non-financial corporate sector and problems in access to credit (especially for SMEs), amplified by the fragmentation of the banking sector in the EU continue to weigh on investment capacity especially in these countries. As a result, only a modest recovery in investment trends is expected over the coming years.

In addition, regulatory and non-regulatory barriers to investment remain, and vary in terms of their restrictiveness, complexity or unpredictability. These can result in different investment patterns ([6]).

To help boost investment, the European Fund for Strategic Investments (EFSI) is now operational, together with the European Investment Advisory Hub. The European Investment Project Portal will be operational early next year. It will also be possible to combine the EFSI with other EU funds under Horizon 2020, the Connecting Europe Facility and the European Structural and Investment Funds. All these EU programmes are increasingly supporting investments on the ground across Europe, not only physical investment (infrastructure) but also investment in innovation and knowledge, social infrastructure, as well as access to finance for smaller businesses.

3. LABOUR MARKETS ARE GRADUALLY RECOVERING BUT SUBSTANTIAL DIFFERENCES REMAIN AND A STRONGER ECONOMIC RECOVERY IS NEEDED

3.1. Employment levels and rates continue to increase following the 2013 recovery but are uneven across Member States and population groups

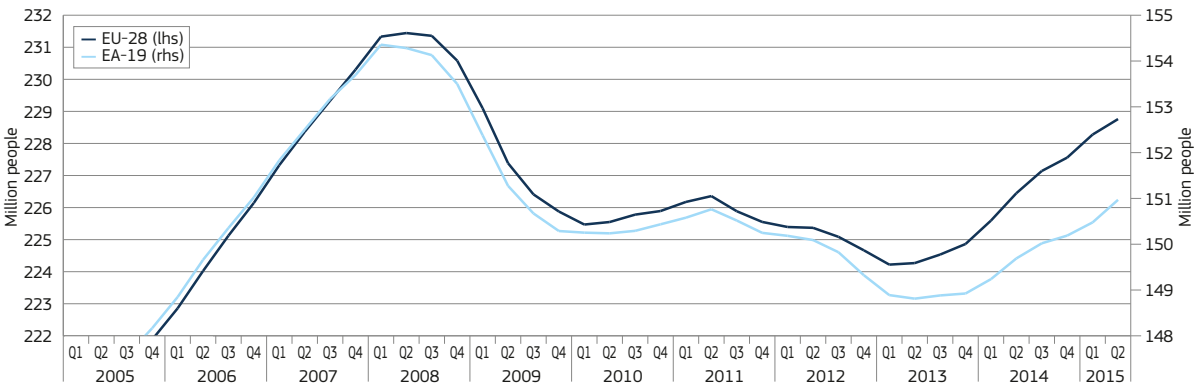
Following the double-dip recession which brought about a significant decline in employment, EU and EA employment levels started to grow again in mid-2013 (**Chart 6**). In the year to the second quarter of 2015, employment grew by 0.9% in the EU and 0.8% in the EA and in most Member States, including those hit hard by the crisis (**Chart 7**).

Employment levels remain well below those of 2008 (**Chart 6** and statistical annex) despite the increase observed since 2013. In net terms, about 7.3 million fewer people were employed

([5]) http://ec.europa.eu/priorities/jobs-growth-investment/plan/docs/factsheet1-why_en.pdf.

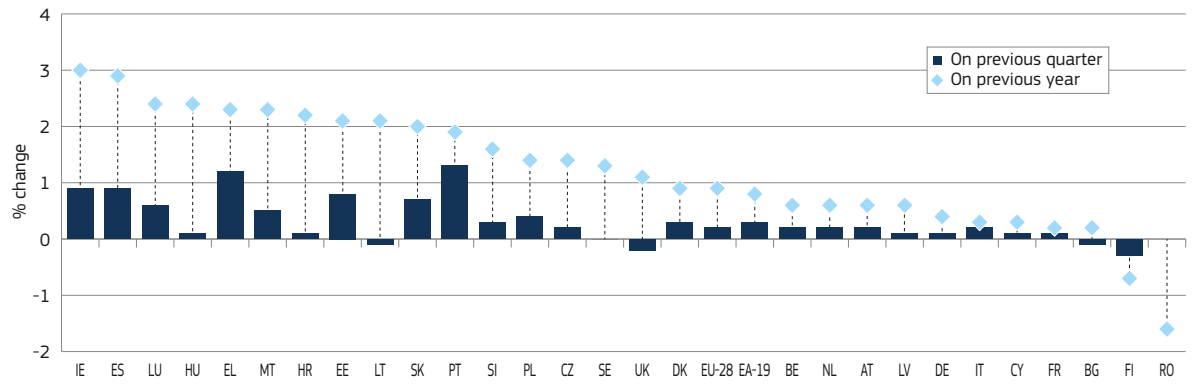
([6]) See "Challenges to Member States' Investment Environments", Commission Staff Working Document (2015) 400 at http://ec.europa.eu/europe2020/pdf/2016/ags2016_challenges_ms_investment_environments_en.pdf.

Chart 6: Employment levels in the EU and EA, EU (left) and EA (right)



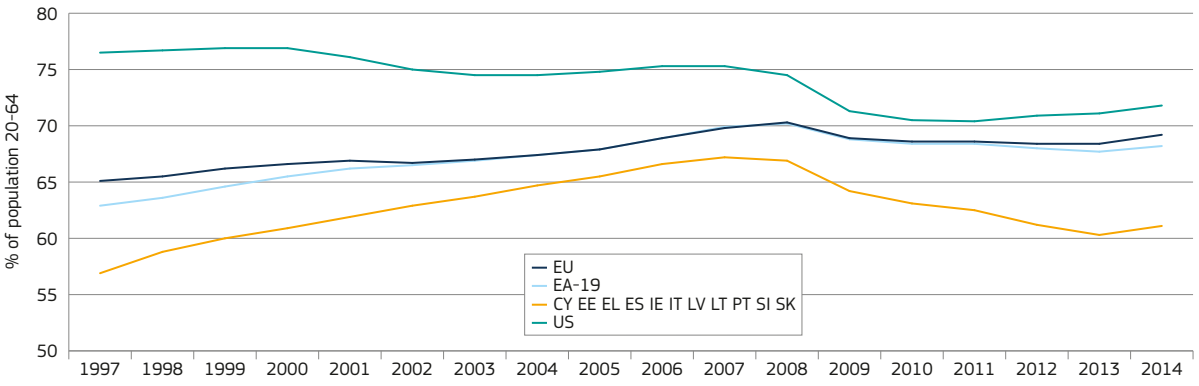
Source: Eurostat, National Accounts, data seasonally-adjusted [namq_10_pe].

Chart 7: Employment growth in EU, EA and Member States, 2015Q2



Source: Eurostat, National Accounts, data seasonally adjusted (q-o-q) and non-seasonally adjusted (y-o-y) [namq_10_pe].

Chart 8: Employment rate in the EU, EA, US and some Member States since 1997



Source: Eurostat, LFS, [lfsi_emp_q].

in the first quarter of 2013 (when employment reached its lowest level since 2008) than in the second quarter of 2008 (employment peak). In the second quarter of 2015, employment had recovered by about 4.5 million jobs from its lowest level. This means that there were still about 2.7 million fewer people employed in the EU than in the second quarter of 2008 (**Chart 6** and statistical annex). In addition, there are substantial differences across the EU, and in a few Member States employment grew in 2014 but declined again in the second quarter of 2015 (**Chart 7**).

Following the decline observed throughout much of the 2009-2012 period, employment rates for 20 to 64 year-olds in the EU have also risen since 2013 (see statistical annex and **Chart 8**). They have risen in virtually all Member States, including in the countries hit hardest by the crisis, though differences remain.

In the year to the second quarter of 2015, the EU employment rate increased

by 0.8 percentage points (pps) and stood at about 70%. For the EA, the employment rate also increased over the year (0.7 pps) to about 68.9% in the second quarter of 2015. While employment rates in 2014 are higher than those of 2013, they remain below those of 2008 (see statistical annex) and remain some way off and further from the Europe 2020 target rate of 75% (**Chart 9**).

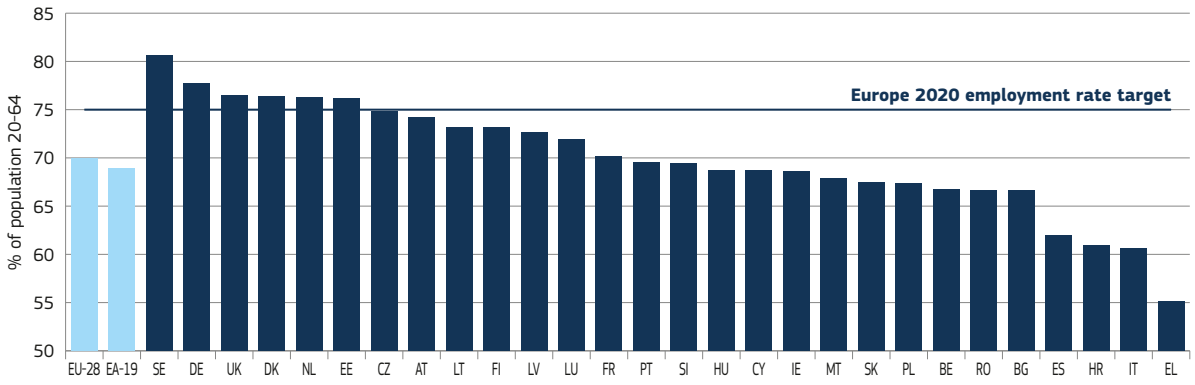
The improvement in employment has now extended to most sectors, including those most affected by the crisis such as agriculture, construction and industry (**Chart 10**). Services withstood the second recession dip better and drove the initial employment recovery, although industry is once again contributing to employment creation (**Chart 10**). Industry, construction and most service sectors all contributed to employment creation during the year to the second quarter of 2015. However, during the same period, employment continued to decline in agriculture.

Up to 2008, the employment of women in the EU and EA was growing faster than that of men. It also declined much less during the crisis (see statistical annex). However, in the EU, only 61.7% of mothers (aged 25-49) with children below 6 years are employed, compared to 76.9% of those without children. But there are large cross-country variations. Since 2013 employment has been growing for both men and women, though more rapidly for women. In contrast, the employment of men was more strongly affected by the crisis as they were more often employed in sectors such as construction that were hit particularly hard by the crisis. Nevertheless, with the sustained recovery, employment levels of men continue to increase.

The general 'catching up' of female employment is related to structural factors affecting the labour market participation of women, ranging from changes in role models and social values to policies making it easier to reconcile work and household responsibilities such as child care provision, flexible working hours, reduction in financial disincentives, etc. Pension reforms may also have increased the labour market participation of older women. Despite these developments, the overall EU employment rate of men (75.7%) remains much higher than that of women (64.4%) with a gender gap of more than 11 pps in the second quarter of 2015 (**Chart 11** and statistical annex).

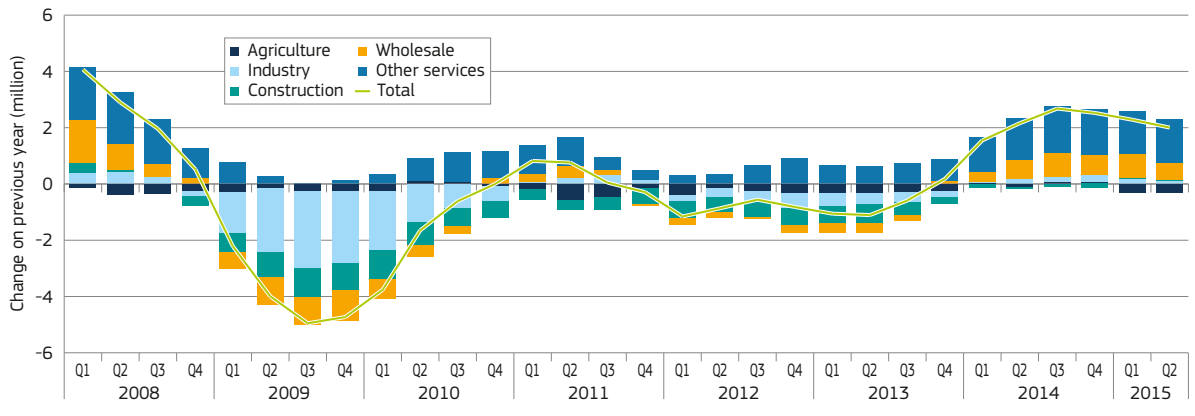
Different age groups fared differently both between 2008 and mid-2013 when employment declined and since mid-2013 when employment started to increase. While the employment of workers aged 45 and over stabilised throughout the 2009-2013 period, with the employment of those aged 55-64 actually increasing, most other age groups saw a reduction in their employment numbers. Since mid-2013, employment has increased for all age groups though again relatively more for the older age groups. The EU employment rate has increased since 2013 following the decline from 2008 to 2013. Again a different evolution can be observed across

Chart 9: Employment rate - EU, EA and Member States, 2015Q2



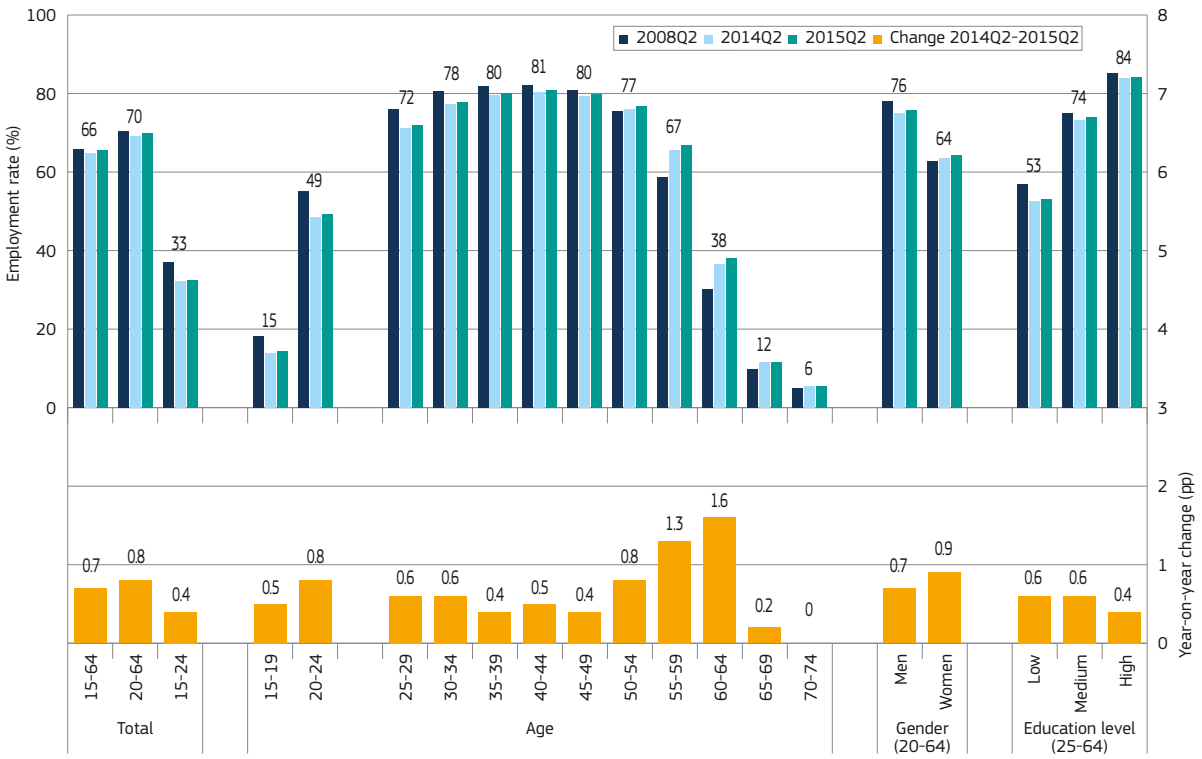
Source: Eurostat, LFS, data non-seasonally adjusted [lfsi_emp_q].

Chart 10: Employment level and changes by NACE sectors in the EU-28



Source: Eurostat, National Accounts, data non-seasonally adjusted [namq_10_a10_e].

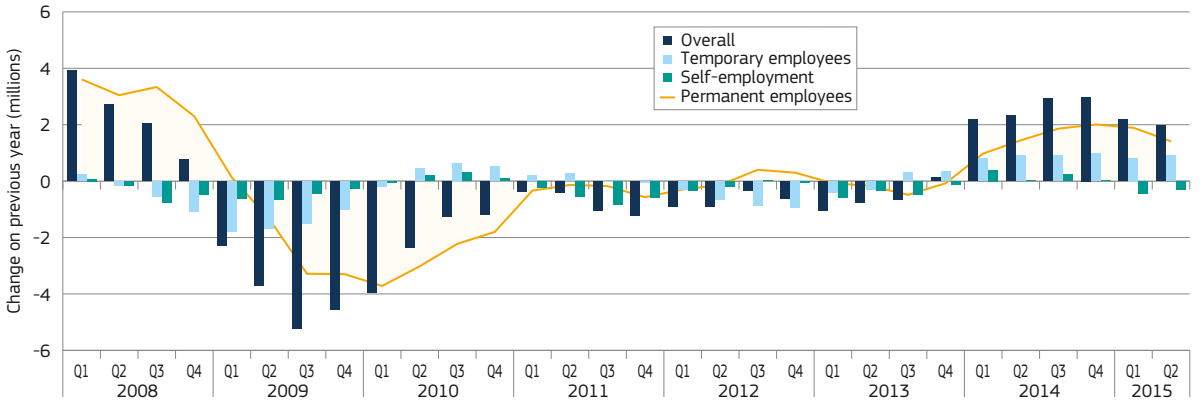
Chart 11: EU employment rate by gender, education and age, 2015Q2



Source: Eurostat, LFS, data non-seasonally adjusted [lfsi_emp_q, lfsq_ergaed].

Top chart: Employment rate (% of respective population). Bottom chart: Change in employment rate 2014Q2-2015Q2 (pp).

Chart 12: Change in permanent and temporary employment and self-employment at EU level



Source: Eurostat, LFS, data non-seasonally adjusted [lfsq_egaps, lfsq_etgaed].

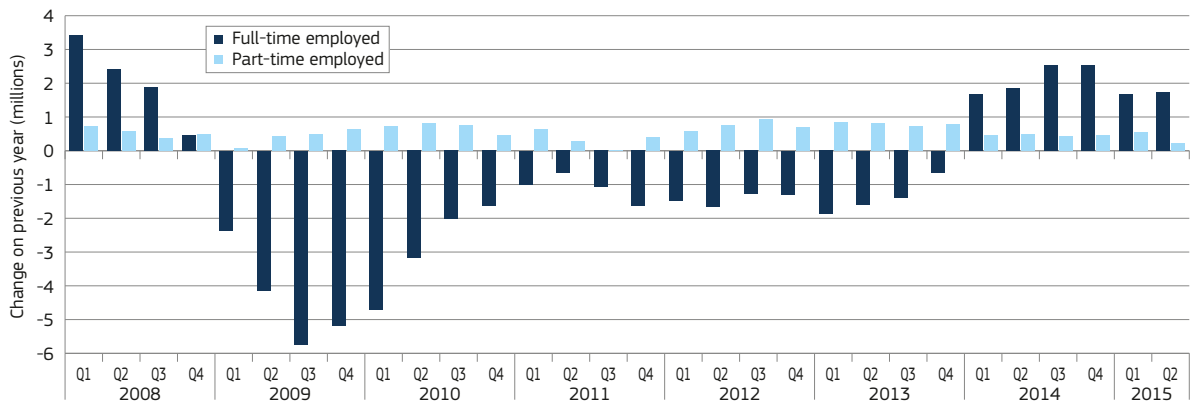
age groups. Contrary to the general evolution, the employment rate for the older age (50+) groups has never declined and has actually increased throughout the crisis and continues to do so (**Chart 11**).

When looking at types of employment contracts, the number of employees with permanent contracts and the number of full-time contracts started to increase in early 2014 (**Chart 12** and **Chart 13**), after the sharp decrease in 2009-2010 and the moderate but continuous decline during the 2010-2013 period. **Chart 12** shows that, from mid-2008, temporary contracts were the first to decline, together with self-employment. As a result of activity contraction, temporary contracts were not renewed. Permanent contracts suffered larger declines in absolute terms in 2009-2010-2011.

The 2013 recovery saw an initial increase in temporary contracts. However, since 2014 and for several quarters now, the number of new permanent contracts has been increasing and, in absolute terms, they are now outnumbering new temporary contracts. At the same time, the number of temporary jobs continues to increase and represent a significant share of total employment. In contrast, the number of self-employed persons appears to be decreasing. Note that the share of employees on temporary contracts, as a proportion of all employees, has remained rather stable since 2007 at about 14%. Analysis shows that these types of contracts do not always act as a stepping stone to permanent jobs.

While part-time contracts have not declined since 2008 (**Chart 13**), full-time contracts systematically decreased up to 2014. Since then, the number of full time contracts has been increasing more than part-time contracts. Nevertheless, the

Chart 13: Change in part-time and full-time employment - EU

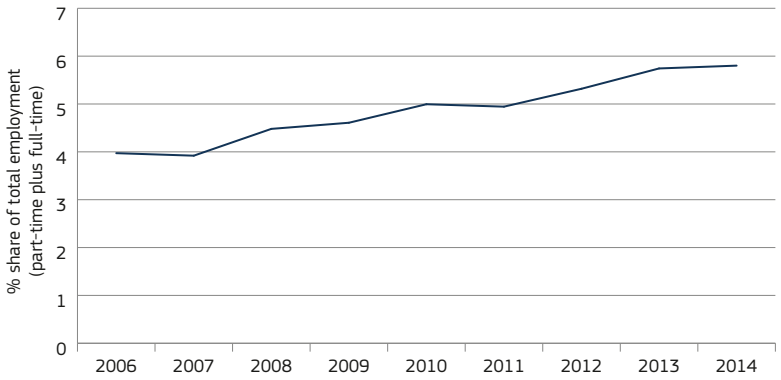


Source: Eurostat, LFS, data non-seasonally adjusted [lfsq_eftpt].

number of people working full-time in the EU in the second quarter of 2015 remains 4.2% lower than it had been in 2008, while part-time employment has increased by 9.8%. Moreover, involuntary part-time accounts for a significant share of part-time work in several Member States, with implications for income and potentially increasing the risk of poverty or social exclusion (see below). The share of part-time employment in total employment has increased from under 18% in 2007 to almost 20% in 2014.

The increase in part-time employment partly reflects a longer-term trend often linked to more flexible working arrangements and diversification of work schedules, including non-standard and variable working hours, which are associated with an increase in the activity rates of women, older workers or those with disabilities or family responsibilities more generally. Nevertheless, a large part of the increase in part-time work is accounted for by an increase in involuntary part-time, almost 2 pps according to LFS data (**Chart 14**). In the context of the economic contraction, a stronger reliance on part-time work, while not ideal, may have prevented a larger reduction in the number of jobs.

Chart 14: Share of involuntary part-time in total employment, EU-28



Source: Eurostat, LFS, data non-seasonally adjusted [lfsq_eftpt].

3.2. Unemployment continues to decrease, albeit slowly, remaining high and close to historical highs in a number of countries

As a result of the economic crisis, the EU unemployment rate increased from under 7% in spring 2008 to 10.8% in spring 2013 (**Chart 15**), representing an increase of 9 million in the number of people who were out of work. The unemployment rate reached historical highs in a significant number of Member States (**Chart 16**), with increased country differences observed. The economic recovery and gradual labour market upturn has led to a gradual reduction in unemployment rates since April 2013, which has continued throughout 2014 and the first half of 2015. Some country convergence has been observed since.

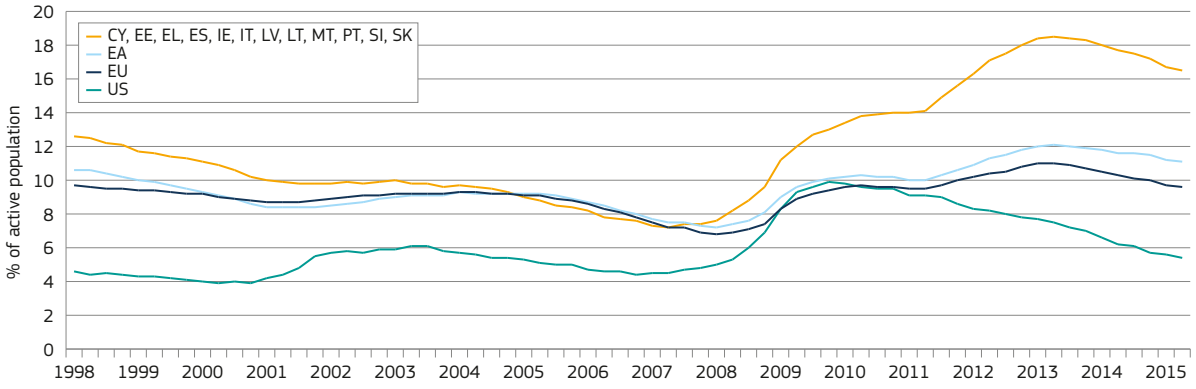
From September 2014 to September 2015 the unemployment rate went down from 10.1% to 9.3% in the EU and from 11.6% to 10.8% in the EA. This decline represents 2 million fewer unemployed people in the EU, including 1.3 million in the EA. Although there are around 4 million fewer unemployed people since unemployment peaked in April 2013, unemployment has yet to recede to pre-crisis levels. Despite the decrease in unemployment observed since 2013, unemployment levels remain well above those of 2008. In September 2015, there were about 22.5 million people unemployed in the EU (including 17.3 million in the EA); this means that around 6.5 million more people were unemployed in September 2015 than in March 2008.

Compared to 2008, the unemployment rate is now higher for both men and women, although the unemployment rate increase observed between 2009 and early 2013 was relatively higher for men than for women.

The crisis affected Member States' unemployment rates in different ways. Despite some significant convergence since 2013, differences in Member State unemployment rates remain considerably higher than they had been in 2008. Several Member States registered historic peaks of unemployment (**Chart 16**) while others did much better. In September 2015, it ranged from about 5% or less in Germany, the Czech Republic, Malta and the United Kingdom to more than 20% in Spain and Greece.

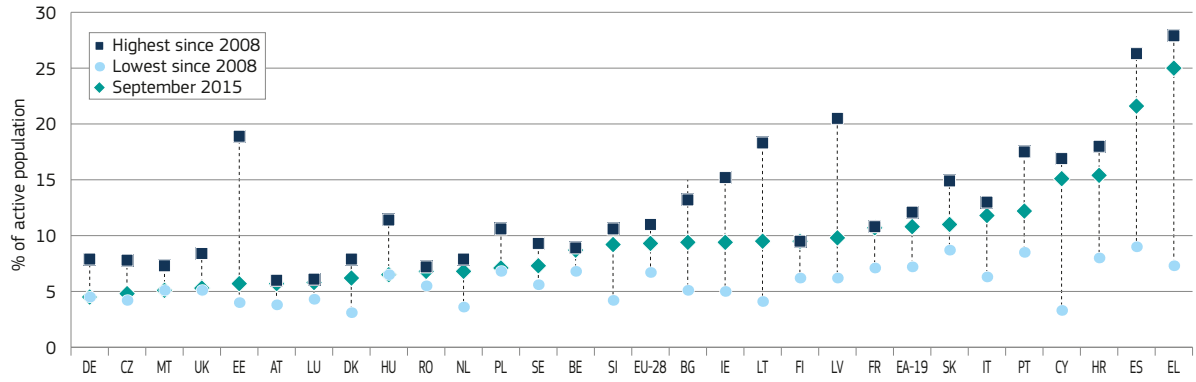
Overall, employment in the EU has been growing and unemployment has been falling, amidst the modest economic

Chart 15: Unemployment rate in the EU, EA, US and some countries since 1998



Source: Eurostat, series on unemployment, data seasonally adjusted [une_rt_m].

Chart 16: Unemployment rates in the EU, EA and Member States (September 2015 and highest and lowest rate since 2008)



Source: Eurostat, series on unemployment, data seasonally adjusted [une_rt_m].

Note: EL, UK: July 2015.

recovery and subdued capital spending ([7]). Therefore, some additional caution may be warranted when looking forward as to the potential employment growth and unemployment decline. Stronger economic growth is needed to ensure sustainable labour market recovery.

In addition, structural drivers of change such as technological innovation and globalisation, pose a challenge to job creation. They can bring along opportunities and challenges to the world of employment. They create new goods and services and therefore new markets, with the potential to create new jobs. Technology can mitigate physical barriers and allow for more flexible working arrangements which may support labour market participation of certain groups such as people with disabilities or family responsibilities. Technological innovation changes the way work is done (changing working hours, working premises…), allowing for more autonomy, responsibility and flexibility. At the same time, it can render many tasks – including non-routine tasks and skills obsolete at a fast rate. Some (e.g. Frey and Osborne, 2013) ([8]) predict that, in the next 20 years, up to 50% of the existing jobs across various levels of skills risk being automated (replaced by technology) in advanced economies.

Technology and globalisation are putting a premium on creative and knowledge occupations. As a result, job polarisation may be a predominant characteristic of future labour markets. On the one hand, skill-biased technological progress will increase the demand for high-skilled workers and induce the replacement of workers carrying out routine tasks by machines and processes. On the other hand, it is to be expected that job opportunities for non-routine manual workers such as housekeeping, hair dressing, gardening and caring activities will remain strong. These changes may impact on the number and types of jobs that will be created in the near to the longer future ([9]).

3.3. Long-term unemployment and very long-term unemployment now make up a large share of unemployment

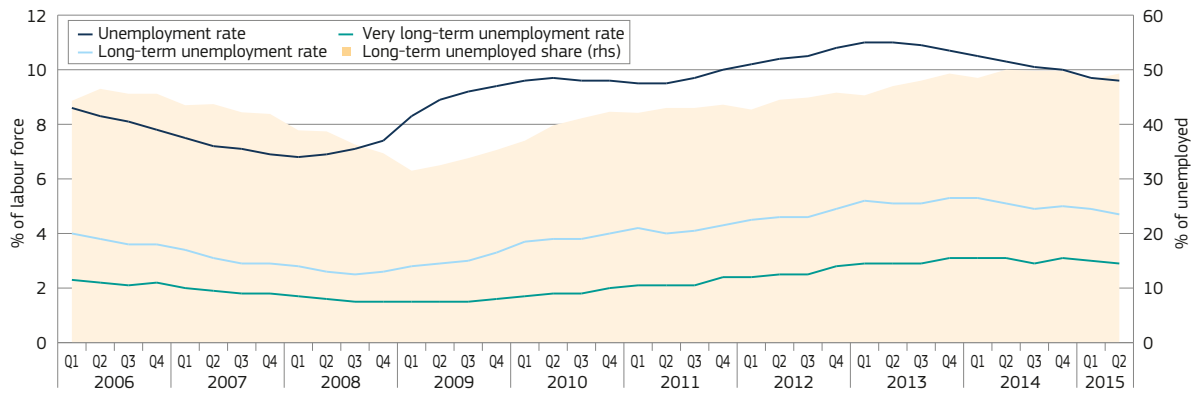
The long, deep crisis and modest recovery has resulted in high levels of long-term unemployment (LTU) and very long-term unemployment (VLTU). In the

([7]) According to the Okun's Law, which is an empirically observed relationship, to achieve a 1 percentage point decline in the unemployment rate in the course of a year, real GDP must grow approximately 2 percentage points faster than the rate of growth of potential GDP over that period.

([8]) See Frey, C. B. and Osborne, M. A."The Future Of Employment: Howsusceptible Are Jobs To Computerisation?, OMS working paper, 2013 At http://www.oxfordmartin.ox.ac.uk/downloads/academic/The_Future_of_Employment.pdf.

([9]) History shows that it is difficult to project the exact **quantitative impact** (in terms of jobs and hours worked) of ongoing and future technological innovations. For example, John Maynard Keynes wrote in 1930, reflecting on job opportunities in 2030, that *"We are being afflicted with a new disease … namely, technological unemployment. This means unemployment due to our discovery of means of economising the use of labour outrunning the pace at which we can find new uses for labour."*

Chart 17: Unemployment and long-term unemployment rates and share (EU, 2006-2015, quarterly data)



Source: Eurostat, LFS, data seasonally adjusted (unemployment rate) and non-seasonally adjusted (long-term unemployment rates) [une_rt_q, une_ltu_q].

Left axis: Unemployment rates (% of labour force). Right axis: unemployment share (% of unemployed).

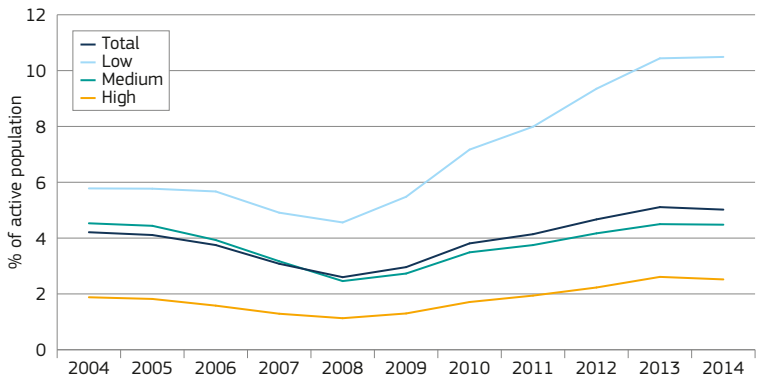
second quarter of 2015, about 11 million people had been unemployed for more than a year, and two thirds of these (about 7 million) had been unemployed for more than 2 years. In total, the long-term unemployed accounted for 4.7% of the EU's total labour force in the second quarter of 2015 and nearly 50% of total unemployment (**Chart 17**).

While a decline can be seen for those unemployed for less than a year and those who have been unemployed for between 12 and 18 months, there is still little movement for those unemployed for more than 18 months. Overall LTU and especially VLTU are declining very slowly.

The economic crisis appears to have hit low-skilled workers hardest, with their long-term unemployment rate doubling between 2008 and 2013 (**Chart 18**).

The high rates of very long-term unemployment pose significant challenges to both the EU's labour markets and its economy. Indeed, the probability of moving from unemployment to inactivity increases with the time spent in unemployment (see chapter on long-term unemployment). An increase in inactivity rates is particularly worrying in view of the projected population ageing and consequent decline in the working-age population which can already be observed in the EU. This can have major negative consequences for overall GDP growth, particularly without significant increases in productivity.

Chart 18: Evolution of long-term unemployment in the EU by skills/education level, 2004-2014



Source: EU-LFS, DG EMPL calculations.

Likewise, long-term unemployment has serious social and financial implications for the individual and society. Depending on the adequacy and resilience of social protection systems, long-term unemployment can result in a reduction in individual and household income, with increased risk of poverty and exclusion and a negative impact on health. It can also reduce the individual's human capital and therefore his/her future employability, productivity and earnings. For society, lower employment and lower productivity due to the loss of human capital have a negative impact on economic growth. Undeclared work and social unrest are other potential negative implications, in addition to the fiscal ones associated with lower revenues and higher spending due to increasing social transfers.

Long-term unemployment is not yet fully entrenched but risks becoming so. Current high levels of long-term unemployment reflect, to some extent, an incomplete adjustment to recent economic shocks. In other words, it is taking longer than usual for many people to return to employment, even though they are still actively searching for a job. Attachment to the labour market is attested by increasing activity rates in almost all EU countries (**Chart 19**) and across all age groups (**Chart 20**)([10]). In addition, reductions in unemployment have not been accompanied by any deterioration in other supplementary indicators such as discouragement and underemployment for most Member States, though this may be the case in some. Moreover, the probability to move from unemployment to inactivity

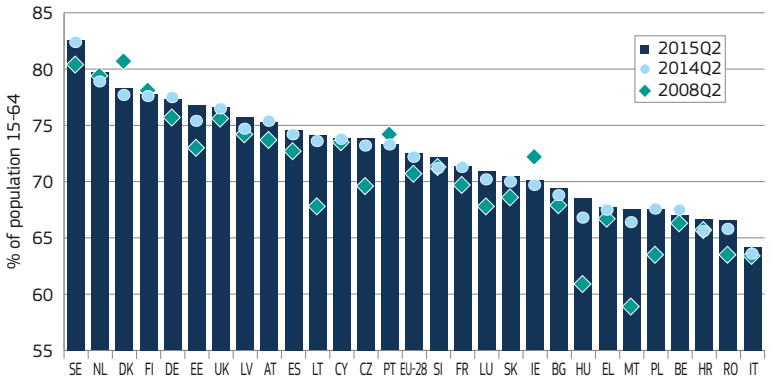
([10]) The only exception is perhaps the youth but inactivity rate for young people 15-24 has been accompanied by an increased participation in education and training (see further on).

for the long-term unemployed is now lower than in pre-crisis years (see chapter on long-term unemployment).

The increase in activity rates is a welcome development: unlike in previous crises and recessions, activity rates remained stable or increased in the vast majority of Member States. Access to child care and more flexible working arrangements, pension reforms and the need for additional income in the presence of increased uncertainty could explain this development. However, activity and employment rates will need to increase further in view of the ageing challenge ([11]). Population ageing results in a decrease in the working-age population and an increase in the old-age dependency ratio. A higher share of the old and very old in the population and a reduction in the working-age population place increased pressures on public spending (pensions, health care and long-term care). To tackle the demographic challenge and ensure future growth, it is necessary to increase activity and employment rates and to ensure longer working lives, thereby reducing the dependency ratio.

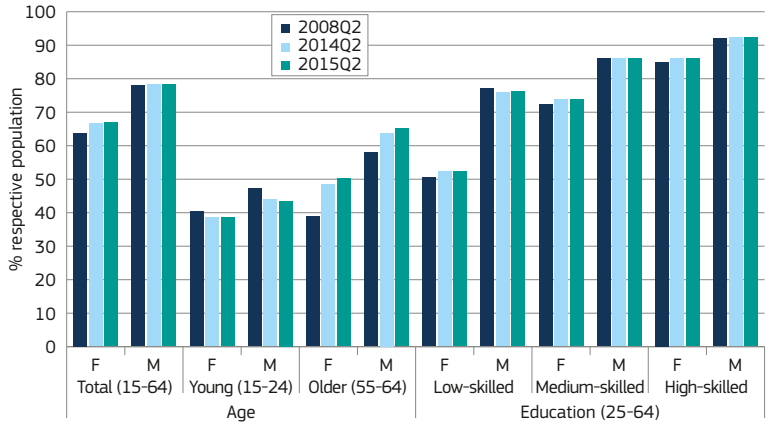
Analysis ([12]) shows that both supply and demand side policies can play a role in helping the long-term unemployed back to employment. On the supply side for example, countries which combine activation measures with access to training and well-designed income support for the unemployed weathered the crisis better and have higher levels of returns to employment.

Chart 19: Activity rates EU, EA and Member States



Source: Eurostat, LFS, data non-seasonally adjusted [lfsi_act_q].

Chart 20: EU Activity rates by gender, education and age, 2015Q2



Source: Eurostat, LFS, data non-seasonally adjusted [lfsi_act_q].

3.4. Youth unemployment remains high but young people are slowly becoming more engaged in either employment or in education and training

For young people, recent developments are modest but encouraging, with youth unemployment decreasing, youth employment increasing slightly, and a shrinking number of those who are not in employment, education and training (NEET) while the participation in education is increasing.

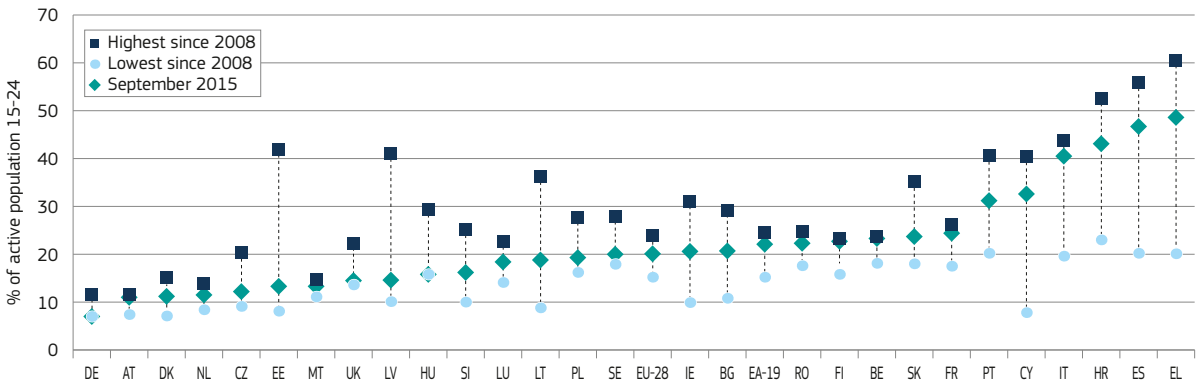
Following the significant increase observed between 2009 and 2013, youth unemployment started to fall but was still very high in 2014: 22.2% in 2014 compared to 15.9% in 2008 (**Chart 22**). In the year to September 2015, the youth unemployment rate fell by 2.0 pp in the EU and 1.3 pps in the EA and is now 19.9% and 22.2% respectively (**Chart 21**). This represents a decline of around half a million unemployed youths in the EU, including 255000 in the EA. Nevertheless, the EU and EA youth unemployment rates in September 2015 were still higher than the rate (around 15% in both the EU and the EA) seen in March 2008. In September 2015, youth unemployment affected 4.5 million people in the EU and 3.1 million in the EA.

The youth unemployment rate declined in most Member States over the year to September 2015, although it varies considerably across Member States, from 7% in Germany, to almost half of the active population aged 15-24 in Greece and Spain, where it has almost tripled since 2008 (**Chart 21**). The youth unemployment rate remains particularly high in Spain (46.7%), Greece (48.6%), Croatia (43.1%) and Italy (40.5%). In the vast majority of Member States, it remains close to historical peak levels. The dispersion is currently higher than in 2008 although some convergence has been observed since 2013.

([11]) The 2015 EC/EPC Ageing Report projections suggest that up to 2022 the rising employment rates will offset the decline in working-age population already observed; but from 2023 the ageing effect dominates and the increase in employment rates will be slower due to a lower impact of increasing female participation rates and older workers' participation rates. As more people are living longer, the demographic old-age dependency ratio will nearly double over the long-term: from four working-age people for every person aged over 65 years to about two working-age persons. If productivity does not substantially increase to compensate for the reduction in the working-age population, public spending is projected to increase by 1.4 pps of GDP in the EU and 1.5 pps in the EA up to 2060, or even by about 3.5pps when a higher risk scenario is considered. See http://ec.europa.eu/economy_finance/publications/european_economy/ageing_report/index_en.htm.

([12]) See the chapter on long-term unemployment in this ESDE review and the 2015 Labour Market Developments in Europe Review. See http://ec.europa.eu/social/main.jsp?catId=738&langId=en&pubId=7811&furtherPubs=yes.

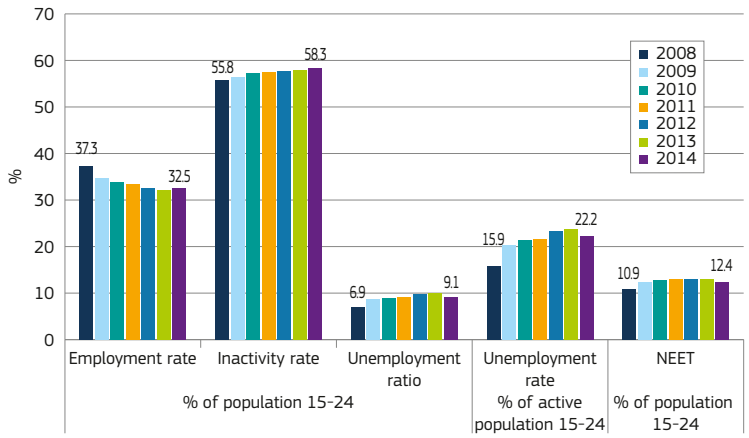
Chart 21: Youth unemployment rates in the EU Member States in September 2015 and the highest and lowest rates since 2008



Source: Eurostat, LFS, data seasonally adjusted [une_rt_m].

Note: EL, UK: July 2015; SI, CY and HR: 2015Q3; RO: 2015Q2.

Chart 22: Labour market indicators for youth, 2008-2014



Source: Eurostat, LFS.

Following the decline observed from 2009 to 2013, the youth employment rate increased in 2014 to 32.5% (**Chart 22**). In the second quarter of 2015, 32.5% of young people aged 15-24 in the EU had a job, up from 31.2% in the second quarter of 2014, but down from 37.1% in the second quarter of 2008.

When looking at unemployment not as a share of the active population (those working plus those looking for a job) but as a share of the population in the age group 15-24 (the unemployment ratio), unemployment affected about 9% of young people aged 15-24 in the EU in 2014, compared to 6.9% in 2008. In the second quarter of 2015, it was 8.3% compared to 9.0% in the second quarter of 2014 and 6.6% in the second quarter of 2008.

The share of young people 15-24 not in employment, education and training (NEETs), though still high, decreased, and enrolment in education and training increased: 12.4% of young people 15-24 in the EU were NEETs in 2014 compared to 13% in 2013 and 11% in 2008 (**Chart 22**). Nearly 70% of 15-24 year-olds were in education in 2014.

Despite recent positive developments, getting young people into work is crucial to avoid competence erosion or lack of skill acquisition, since people accumulate skills quickly in the early years of their careers. Analysis has shown that the skills levels of adults from a disadvantaged background can improve over time through on-the-job learning. Therefore, getting young people into work and ensuring life-long learning improves workers' skills and competencies in the work place and increases their productivity and earnings while boosting economic growth.

3.5. The average number of hours worked is now increasing but it is still below the pre-crisis levels

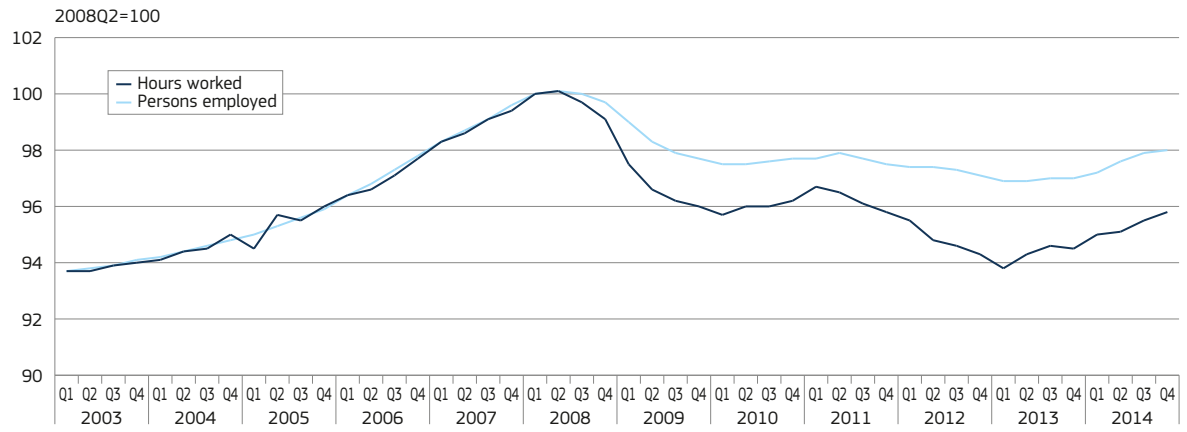
From mid-2008 to the beginning of 2013, the average number of hours worked declined faster than the number of people in employment (**Chart 23**), but has been increasing since then.

The overall decline in hours worked was associated with an increased reliance on part-time employment (see chapter on labour legislation) alongside a reduction in the average number of hours worked by full-time workers, falling from a weekly average of 41.0 hours in 2008 to 40.6 in 2013. The increase in the average number of hours since 2013 has been accompanied by an increase in full-time employment over the past five quarters (**Chart 23** and **Chart 13**).

An overall reduction in hours worked contributed to the adjustment during the crisis in that the increased reliance on part-time jobs and the reduction of total hours worked in full-time jobs may have avoided a larger loss of jobs. One important question is whether a 'catching-up' effect in hours worked can limit the extent of job creation.

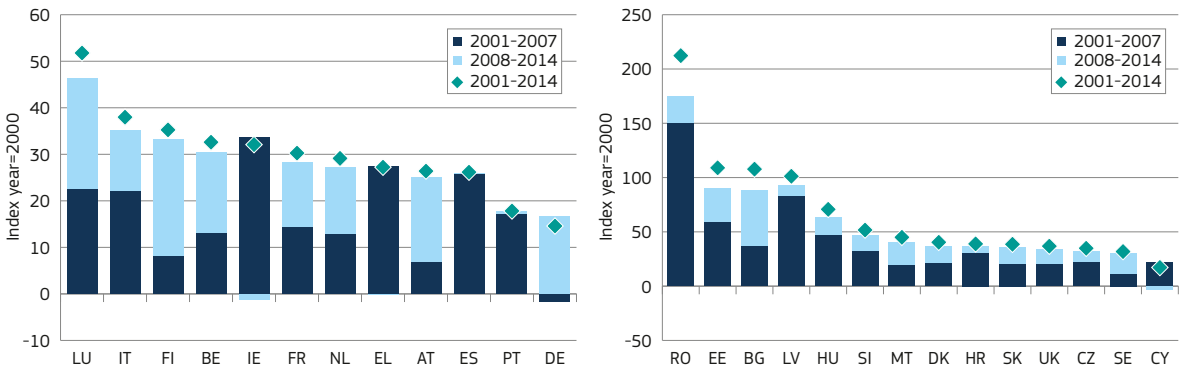
The crisis may have accentuated the long-term trend of an increasing share of part-time employment. This is often linked to more flexible working arrangements, a diversification of work schedules (including non-standard and variable working

Chart 23: Average number of hours worked in the EU



Source: Eurostat, National Accounts.

Chart 24: Cumulative nominal unit labour costs, 2001-2014



Source: DG EMPL calculations based on Eurostat (nama_10_lp_ulc).

Note: provisional data for BG, EL, ES, CY, NL, PT, RO.

hours) and higher activity rates of some population groups, including women and older workers. The reduction in the number of usual weekly hours is also associated with reductions in full-time working hours in several Member States through legislation. If this trend were to continue, it would boost job creation. However, the opposite may occur if there is a large 'catching-up' effect in the number of hours worked by those already in employment.

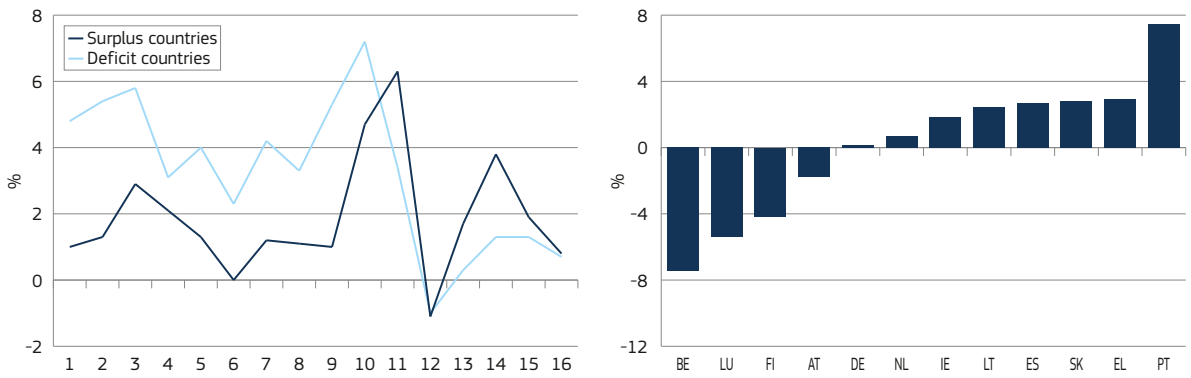
Job quality is another relevant factor in this context. Fewer working hours may reflect more flexible working arrangements and higher participation rates of women and older workers, many of whom tend to opt for part-time work. However, involuntary part-time work now accounts for a significant share of part-time work in several Member States (see chapter on labour legislation), especially among low-paid jobs, with a significant share of net job creation since 2011 having been in the form of low-paid part-time jobs, resulting in low yearly earnings (ESDE 2014). This may reduce the potential impact of job creation on poverty reduction.

3.6. Nominal unit labour costs, which increased in some Member States before the crisis, are now declining

From 2001-2007, several Member States (notably in the EA) experienced a strong cumulative increase in nominal unit labour costs (which measures nominal compensation per employee). The countries affected included Ireland, Greece, Spain, Luxembourg and Italy (**Chart 24**), while Germany and, to a lesser extent Austria and Finland, experienced only very low increases. In the presence of fixed nominal exchange rates, some Members States saw an unsustainable distortion of labour costs and cost-competitiveness within the EA in the build-up to the crisis.

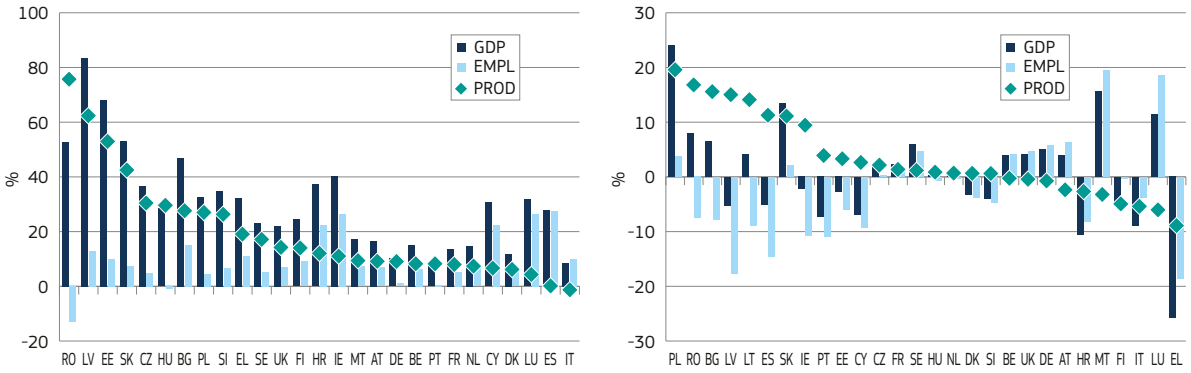
Since 2008, several Member States, including Ireland, Greece, Spain and Portugal (**Chart 24**), have seen a downward adjustment in nominal unit labour costs. Over the entire 2001-2014 period, Luxembourg had the highest cumulative growth and Germany the lowest. Outside the EA (including the Member States that joined the EA after 2001), Romania, Bulgaria and the Baltic Member States showed strong increases in growth in nominal unit labour costs over the 2001-2007 period, while Cyprus recorded a sizable decrease.

Chart 25: Wage developments: changes in unit labour cost and employment adjustment



Note: Surplus countries: BE, DE, LU, NL, AT and FI.

Chart 26: Cumulative productivity growth and its components (2001-2007 and 2008-2014)



Source: DG EMPL calculations based on Eurostat (nama_10_pe and nama_10_gdp).

Note: provisional data for BG, EL, ES, CY, NL, PT, RO; breaks in series of LV, RO and PL.

Since 2010, wages in vulnerable countries have been adjusting, accompanying a job shift from non-tradable to tradable sectors and contributing to rebalancing within the EA (**Chart 25**) and, as such, supporting employment rebalancing (Labour Market and Wage Developments, 2015).

3.7. Cumulative labour productivity growth varies substantially across the EU and has decreased in recent years

Cumulative labour productivity growth (measured as the % change in output per person) varied substantially across Member States during the 2001-2007 period. It was highest in Romania, followed by the Baltic Member States, while it was negative in Italy and very weak in Spain and Cyprus (**Chart 26**). During this period, cumulative labour productivity was mostly supported by positive output growth as well as positive employment growth (except in Romania).

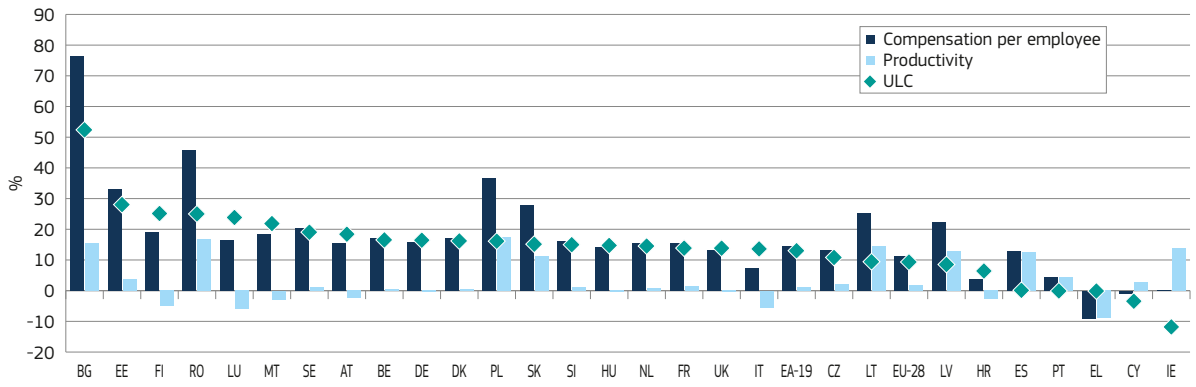
In contrast, during the 2008-2014 period, cumulative labour productivity growth was negative in several Member States, with the greatest contraction occurring in Greece. In Belgium, the United Kingdom, Germany, Austria, Malta and Luxembourg, the cumulative decrease in productivity reflected the fact that the positive cumulative employment growth was stronger than the positive cumulative output growth. By contrast, in Greece, Italy, Finland and Croatia, the decrease in productivity reflected negative cumulative output growth which was stronger than the negative cumulative employment growth (**Chart 26**).

Strong cumulative growth was seen in Poland followed by Romania, Bulgaria, Latvia and Lithuania. However, in Latvia as well as Spain, Ireland, Portugal, Estonia, Cyprus, Denmark and Slovenia, the positive cumulative productivity growth was the result of a stronger cumulative contraction in employment that was greater than the contraction in output (**Chart 26**).

The relative contribution of wages (compensation per employee) and productivity to the evolution of nominal unit labour costs shows whether wages have been evolving in line with productivity. **Chart 27** shows that in some countries – Bulgaria, Romania, Estonia and Poland – strong cumulative growth in unit labour cost was mainly driven by increases in wages, while productivity was weak. In contrast, in Finland, Luxembourg and Italy, it was primarily a contraction in labour productivity that fuelled the nominal unit labour cost growth.

Ireland showed a notable decrease in nominal unit labour cost over the 2008-2014 period, driven by a strong increase in productivity in the face of stagnant nominal compensation per employee. Unit labour costs did not increase in Cyprus, Greece, Portugal and Spain over the 2008-2014 period, although in Spain and Portugal the moderate wage increase was matched by an equally moderate increase in labour productivity. In Greece, both productivity and nominal compensation contracted.

Chart 27: Nominal compensation per employee, productivity, unit labour cost 2008-2014 (cumulative growth)



Source: DG EMPL calculations based on Eurostat (nama_10_pe,nama_10_gdp,nama_10_lp_ulc).

Notes: PL 2014 observation missing. Nominal unit labour cost measures nominal compensation per employee adjusted for productivity.

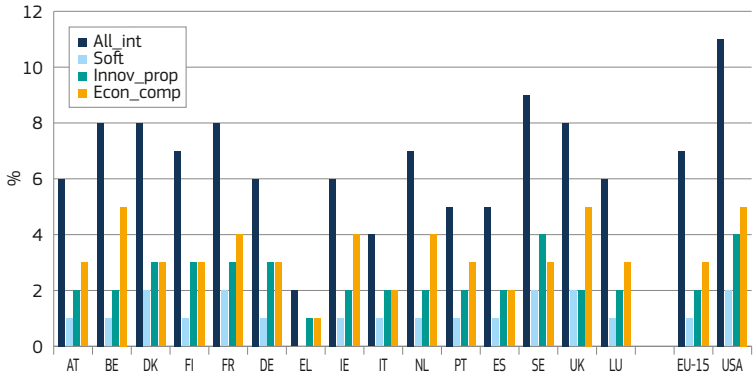
In core euro-area Member States, the moderate cumulative increase in unit labour cost was driven by moderate increases in wages in combination with very weak productivity growth. Outside the EA, cumulative labour productivity growth also remained weak, except in Romania and Poland.

4. BOOSTING KNOWLEDGE-BASED CAPITAL AND SKILLS IS KEY TO RESPONDING TO DEMOGRAPHIC AGEING, TECHNOLOGY DEVELOPMENT, GLOBALISATION AND THE GREENING OF THE ECONOMY

4.1. EU investment in knowledge-based capital lags behind world competitors

An important part of economic growth stems from investment in knowledge creation or intangible assets. Investment in intangible assets by companies in the United States, Japan and Europe has been shown to have a significant impact on overall productivity (Corrado et al., 2011) ([13]). Such knowledge-based capital or intangible assets are grouped into three types: computerised information (such as software and databases); innovative property (such as scientific and non-scientific R&D, copyrights, designs, trademarks); and economic competencies (including brand equity, firm-specific human capital, networks connecting people and institutions, organisational know-how that increases enterprise efficiency, and aspects of advertising and marketing).

Chart 28: Investment in intangible assets as a share of GDP (EU Member States for which data is available for 2010)



Source: Data from INNODRIVE, COINVEST and the Conference Board, Brussels, Belgium, sponsored by FP7, www.INTAN-Invest.net.

Note: all_int stands for expenditure on all intangible assets; soft for expenditure on computerised information (software and databases); innov_prop for expenditure on innovative property assets (scientific and non-scientific R&D, copyrights, designs, trademarks); and econ_comp for expenditure on economic competencies (brand equity, firm-specific human capital, networks connecting people and institutions, organisational know-how that increases enterprise efficiency, and aspects of advertising and marketing).

The measure of investment used in section 2 primarily considers tangible assets and does not look at the evolution of intangible assets. However, the global crisis may have affected the accumulation of intangible assets even more than physical capital. Intangible assets typically entail higher risks than physical or even financial assets and the crisis has increased the risk aversion of many investors ([14]).

The available data show large differences between EU Member States and the US in terms of the intangible assets available in these countries (**Chart 28**). In this respect, differences in the accumulation of intangible assets could be one of the reasons for the relatively slower rate of productivity growth in EU countries compared to the United States.

4.2. Investment in skills is crucial to reducing unemployment and increasing EU competitiveness

Increasing skills levels benefits both individuals and society as a whole, contributing to increases in productivity, competitiveness and growth. While structural drivers of change such as technology,

([13]) See Corrado, C., Haskel, J., Jona-Lasinio, C., Iommi, M. "Intangible Capital and Growth in Advanced Economies: Measurement Methods and Comparative Results", IZA DP No. 6733, 2012. At http://repec.iza.org/dp6733.pdf.

([14]) See for example the OECD work at http://www.oecd.org/sti/inno/newsourcesofgrowthknowledge-basedcapital.htm and http://www.oecd.org/sti/inno/46349020.pdf.

globalisation and the greening of the economy can create new jobs and career opportunities, they can also increase skill erosion, so that skills anticipation and continuous skills updating will be even more important in an ever changing society and economy. The 2016 AGS stresses that 'Equipping people with relevant skills drives innovation and competitiveness and is the basis for high productivity. It is the best way to prevent individuals becoming unemployed, as well as to reduce the risk of poverty and social exclusion.' It stresses the need for a skilled work force notably in view of the fast evolving pattern of work in the digital economy and long-term unemployment.

Previous analysis based on the results of the Survey of Adult Skills (PIAAC) has shown that most EU countries show lower average scores in adult literacy and numeracy than their OECD counterparts and major global competitors (OECD, 2013; European Commission 2014) ([15]). In these tests, the mean average score of the six largest EU countries (Germany, the United Kingdom, Poland, France, Italy and Spain), accounting for more than two-thirds of the total EU population, falls behind that of the EU's competitors (Japan, Australia, Canada, South Korea and even the United States). According to PIAAC data, poor computer or general ICT skills are also common in some EU Member States.

Analyses also show that around 40% of EU firms report difficulties in finding the right mix of skills and that there are significant skills shortages in the EU despite unprecedented levels of unemployment ([16]). However, the share of firms reporting difficulties ranges from more than 60% in Austria and the Baltic States to less than 25% in Croatia, Cyprus, Greece and Spain ([17]).

The difficulty in finding suitably skilled employees may also be due to firms offering uncompetitive starting salaries or non-permanent contracts, inefficient human resource management, insufficient training programmes or career prospects, changes in organisational practices, or, to a certain extent, the result of a firm's success and expansion (see chapter on skills). In general, skills shortages are more prevalent in economies where strong industrial sectors account for a larger share of employment and less prevalent where firms commit to talent management and offer higher quality jobs (better contracts, training, etc.).

Analyses also show that the most competitive countries invest more in skills and life-long training, and that their employers play a crucial role in reducing skills shortages through a mix of human resources policies. Apart from upgrading the skills of their staff (e.g. retraining staff; providing internships and apprenticeship places), they also offer better quality and more stable jobs that are more attractive and base their hiring practices on 'potential' rather than solely on experience. In these circumstances, enterprises can strengthen their talent pipeline both from the outside market (e.g. via local employer associations) and by further investment in their existing workforce (via promotions and job rotations) (see chapter on skills).

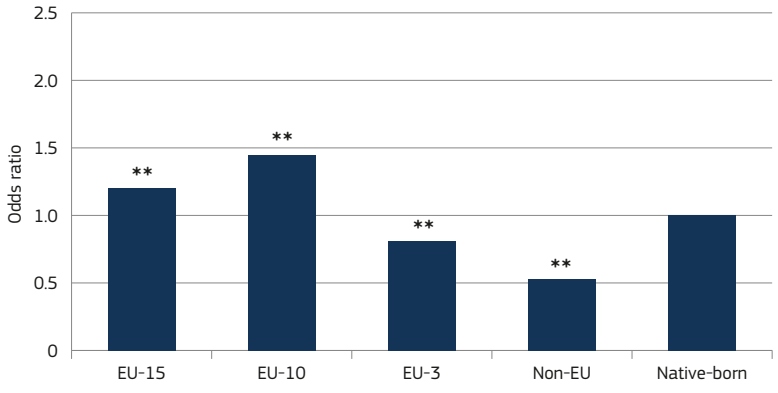
5. Intra-EU mobility contributed to labour market adjustments during the crisis but remains limited

Labour mobility, together with wages, has acted as an important adjustment mechanism both during and following the crisis. During the crisis period, labour mobility may have helped attenuate disparities in the levels of unemployment between countries (Labour Market and Wage Developments, 2015). The stability and health of labour markets serve as the pull factor encouraging mobile workers to move from more depressed markets to more dynamic ones. While most mobile EU citizens move primarily for work-related reasons, migrants from third countries might also come to the EU for work, to join family members or to study/obtain training.

Analyses suggest that mobile workers contribute positively to labour markets. Labour market outcomes of mobile EU people are on average better than those of natives, and they contribute to growth. Mobile EU citizens are, on average, more likely to be employed than nationals and tend to have higher employment rates (**Chart 29**). They tend to be well-qualified and younger and contribute to labour market adjustments and labour allocation by choosing countries with a relatively more stable labour market. Nevertheless, their qualifications are not always fully used in the jobs they obtain in the countries they move to. And foreign-born people often accept a significant wage penalty when taking up work in the EU.

Evidence (see chapter on mobility and migration) suggests that foreign-born people (mobile people and third-country migrants) do not pose a burden on the overall welfare systems of the host countries, notwithstanding potential pressures on the provision of services at the local level, especially if local budgets are not adjusted accordingly. In general,

Chart 29: Odds ratio of EU-mobile workers, native-born and third-country migrants being employed compared to natives (=1), age group 20-64 years, 2012/13



Source: DG EMPL calculations based on Eurostat EU-LFS 2012 and 2013 micro-data (merged).

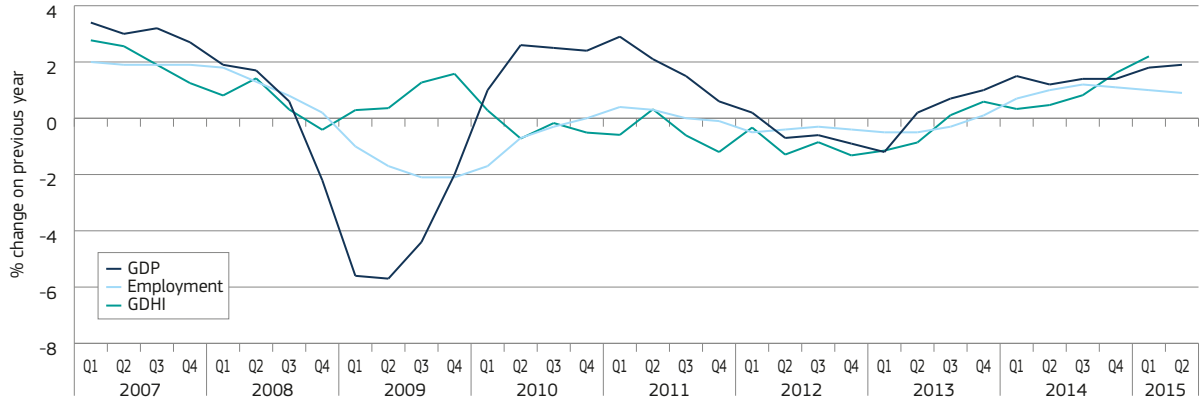
Note: ** denotes: coefficient is statistically significant below 1%. Uncontrolled model.

([15]) See http://www.oecd.org/site/piaac/.

([16]) Skill shortages occur when there are not enough individuals with the required skills within the economy to fill existing vacancies at prevailing market wages and working conditions (and within a reasonable location).

([17]) Spring 2013 European Company Survey, Eurofound.

Chart 30: Real GDP, employment and household disposable income (EU, year-on-year change)



Source: Eurostat, National Accounts, data non-seasonally adjusted [namq_10_gdp, namq_10_pe, nasq_10_nf_tr] (DG EMPL calculations for GDHI).

Note: GDHI EU aggregate for Member States for which data are available, GDP for EU-28.

the opposite is true: all groups of foreign-born people are less likely to receive benefits than native-born people when controlling for their labour market status. Moreover, given their good labour market performance, mobile people from the EU15 and the EU10 depend less on unemployment benefits than native-born people. In addition, among the unemployed, foreign-born individuals are less likely to receive unemployment benefits.

Mobility across the EU has been increasing over the past two decades, particularly after the EU enlargement. Yet, EU mobility is low compared to mobility in the United States ([18]). Four percent of the EU's population aged between 15 and 64 years are living in an EU Member State other than their Member State of birth (mobile EU people). This compares to the situation in the United States where, in the absence of a language barrier, nearly 30 % of the working-age population lives in a different state to that of their birth. In 2014, there were less than 15 million mobile people in the EU, up from slightly less than 12 million in 2006. This is roughly half the number of third-country (non-EU) migrants: there are 28 million third-country migrants aged between 15 and 64 years living in the EU. In other words, only a relatively small share of EU people exercise their right to free movement, while, in the United States nearly 30 % of the working-age population lives in a different state to that of their birth.

With a view to improving the EU's long-term growth performance in the light of demographic ageing and workforce decline, mobility and migration have so far been largely "underused". In view of the steady decline of the working-age population in most EU Member States and to limit the rise in its economic dependency ratio, the EU will need to achieve higher employment rates (including through intra-EU mobility) and productivity growth, and draw on migration from third countries (outside the EU). However, relying on increased mobility and migration is likely to require a comprehensive set of policies to ensure the effective integration of foreign-born people.

6. HOUSEHOLD DISPOSABLE INCOME IS INCREASING GRADUALLY, BUT POVERTY AND EXCLUSION REMAIN HIGH, FUELLED BY UNEQUAL OPPORTUNITIES AND RISING MARKET INEQUALITY

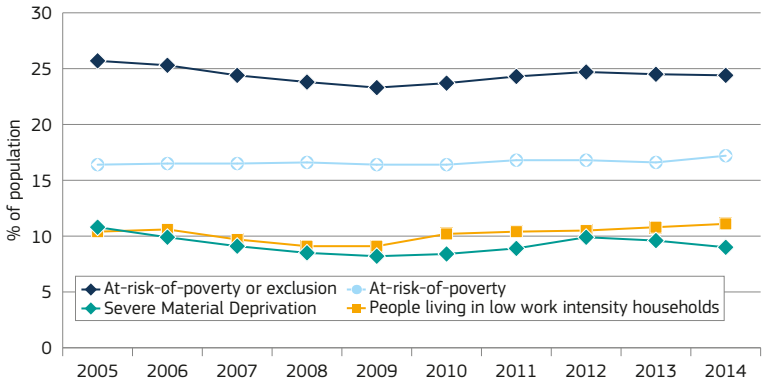
6.1. Poverty and exclusion reduction will depend on the quantity and quality of jobs and who benefits

Household incomes in the EU are on the rise again, benefitting from stronger economic activity and improving labour market circumstances. On average in the EU ([19]), gross disposable household income (GDHI) increased by around 2 % in real terms in the year to the first quarter of 2015 (1.9 % for the EA) (**Chart 30**). Growth in household income is coming from both work and social benefit support. However, note that the level of GHDI is still below the 2009 peak.

([18]) Different legal systems, different educational systems, problems associated with the recognition of qualifications and different languages are some of the obstacles that EU mobile persons will have to face compared to their United States counterparts.

([19]) The real GDHI growth for the EU is a DG EMPL estimation. It includes Member States for which quarterly data are available (18 Member States: AT, BE, CZ, DE, DK, EL, ES, FI, FR, HR, IE, IT, NL, PL, PT, SE, SI and UK, which account for at least 90 % of EU GDHI, PL and RO available up till 2012). The nominal GDHI is converted into real GDHI by deflating with the deflator (price index) of household final consumption expenditure. The real GDHI growth is a weighted average of real GDHI growth in Member States.

Chart 31: Trends in poverty and social exclusion in the EU



Source: Eurostat, EU-SILC [ilc_peps01, ilc_li02, ilc_mddd11, ilc_lvhl11].

Note: EU-27 up to 2009; households with zero or low work intensity:% of population aged 0 to 59; AROPE, AROP: previous year income; SMD: current year; households with zero or low work intensity: previous year.

Following a continuous increase since 2009, the share of people at risk of poverty or exclusion (AROPE) ([20]) reached its peak in 2012 (24.7%). Since then it has shown a small decrease but remains very high: in 2014, 24.4% of the EU population – about 122 million people – were at risk of poverty or social exclusion (**Chart 31** and **Chart 32**). Following a similar path, the AROPE rate in the EA went down to 23.5% in 2014; however, it is still 1.7 pps higher than in 2008.

It is however worth noting that the three components of this indicator (relative poverty, joblessness, material deprivation) behaved differently after 2013. Relative poverty ([21]) (at-risk-of-poverty rate, AROP), which went down slightly in 2013, increased again in 2014. According to estimations ('nowcasts') available for 17 countries, the at-risk-of-poverty rates are not expected to improve in 2015 (reference income of 2014). This renewed increase is worrisome as the income thresholds under which people are considered to be at risk of poverty are also declining for some countries, reflecting a continuous deterioration in living standards.

The share of people living in jobless households (zero or very low work intensity) continued to increase to reach 11.1% in 2014, well above the pre-crisis level of 9.1%. Severe material deprivation (SMD) ([22]) is the only component that has been improving. In 2014, severe material deprivation decreased further to reach 9.0% in the EU, notably thanks to the strong declines in Bulgaria, Romania, and Hungary. Nevertheless, it remains above the level (8.2%) recorded in 2009 (**Chart 31**) and continues to increase in a number of countries, including Spain, Greece and the United Kingdom.

The working-age population and their children were the most affected by the crisis, while the elderly were better protected by the relative stability of pensions compared to earnings from employment (**Chart 33**).

The risk of poverty and exclusion of the working-age population increased from 23% in 2008 to 25.3% in 2013 due to job losses and rising in-work poverty. In 2014 and 2015, the risk of poverty of children (relative income poverty) may have increased further in a number of countries, mainly due to a deeper economic crisis in recent years, a poorer performance of their labour market developments (still marked by high unemployment and long-term unemployment), a modest economic recovery and a macro-economic situation (large public debt and deficit), which have limited the fiscal space for public intervention.

Reductions in unemployment contribute to reducing the levels of poverty, but only half of the poor who find a job actually escape poverty ([23]) (**Chart 34**). Indeed, the impact of job creation and employment growth on poverty depends on whether the new jobs offer a living wage (in terms of both hours worked and hourly wage) and on whether they go to job- rich or job-poor households. In this respect, analyses show that support for the unemployed is most effective when geared towards raising their employability and providing skills that are needed in the labour market, so that they are better able to move into more sustainable jobs.

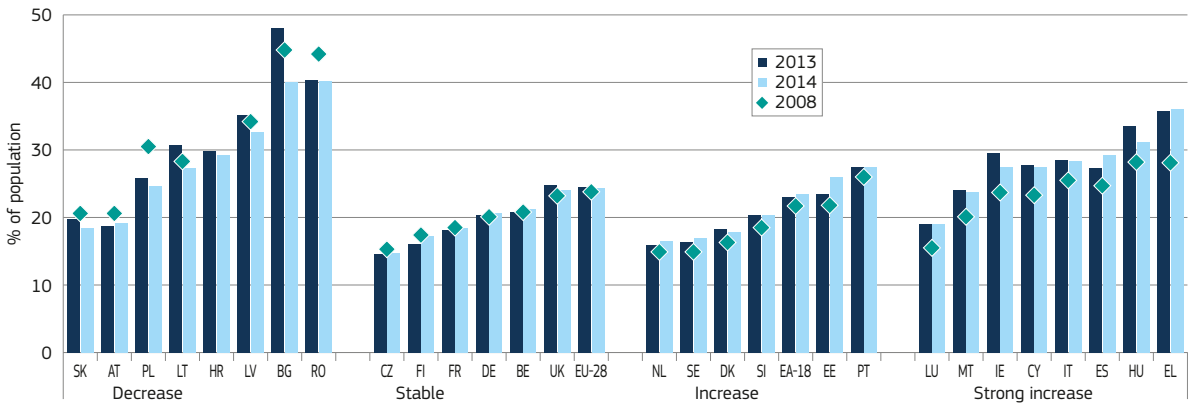
([20]) The EU poverty and social exclusion (AROPE) indicator and one of the Europe 2020 headline targets refers to the situation of people either at risk of poverty or severely materially deprived or living in a household with a very low work intensity. The AROPE rate which measures the share of the total population which is at risk of poverty or social exclusion is calculated as a weighted average of national results on the basis of three indicators (reflecting monetary and non-monetary aspects): the atriskofpoverty rate, the severe material deprivation rate and the share of people living in very low workintensity (quasi-jobless) households. It covers people in any of these categories and, while very broad, reflects the many facets of poverty and social exclusion across Europe. See http://ec.europa.eu/eurostat/statistics-explained/index.php/People_at_risk_of_poverty_or_social_exclusion.

([21]) The relative component of the AROPE is the risk-of-poverty and is defined as the share of people with a disposable equivalised income below 60% of the median income of the country in which they live.

([22]) The material deprivation indicator expresses the inability to afford some items considered by most people to be desirable or even necessary to lead an adequate life. It refers to a state of economic strain and durables, defined as the inability to afford rather than the choice not to do so. In other words it distinguishes between individuals who cannot afford a certain good or service, and those who do not have this good or service for another reason, e.g. because they do not want or do not need it. The EU indicator adopted by the Social Protection Committee measures the percentage of the population that cannot afford at least three of the following nine items: 1) to pay their rent, mortgage or utility bills; 2) to keep their home adequately warm; 3) to face unexpected expenses; 4) to eat meat or proteins regularly; 5) to go on holiday; 6) a television set; 7) a washing machine; 8) a car; and 9) a telephone. The **severe material deprivation rate** (SMD) refers to the share of the population who are unable to pay for at least four of the above-mentioned items.

([23]) Calculations presented in Chart 34 are based on the panel component of EU-SILC, whereby the same households are interviewed over four consecutive years. A quarter of the panel is renewed every year.

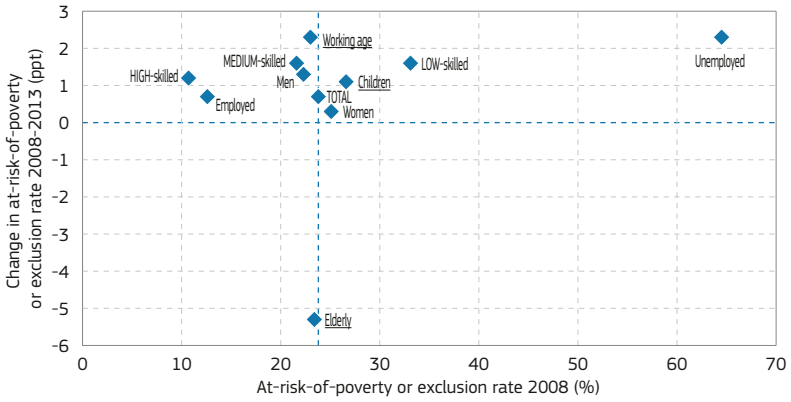
Chart 32: Poverty and social exclusion across EU Member States: 2008, 2013 and 2014



Source: Eurostat, EU-SILC.

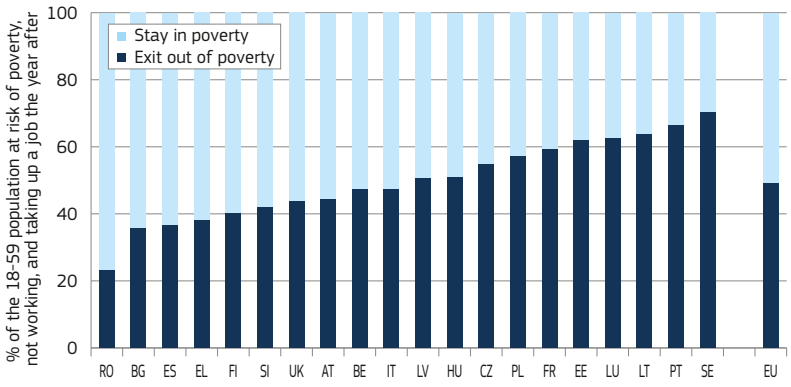
Notes: Country groupings are established by change from 2008 to 2014; ES: 2009 instead 2008, classified based on changes 2009-2014; HR: 2010 instead 2008, classified based on change 2010-2014; UK: break in series 2012, classified based on estimated change; BG, DK EE: break in series 2014 classified based on change 2008-2013; grouping is not based on statistical significance of changes; EU-28: EU-27 for 2008.

Chart 33: Risk of poverty and social exclusion by age group, labour market status and skill level (2008 and change 2008-2013)



Source: Eurostat - EU-SILC.

Chart 34: Share of poor people who were not working and found a job, by poverty status (Transitions 2008-2009)



Source: EU-SILC, DG EMPL calculations ESDE 2013.

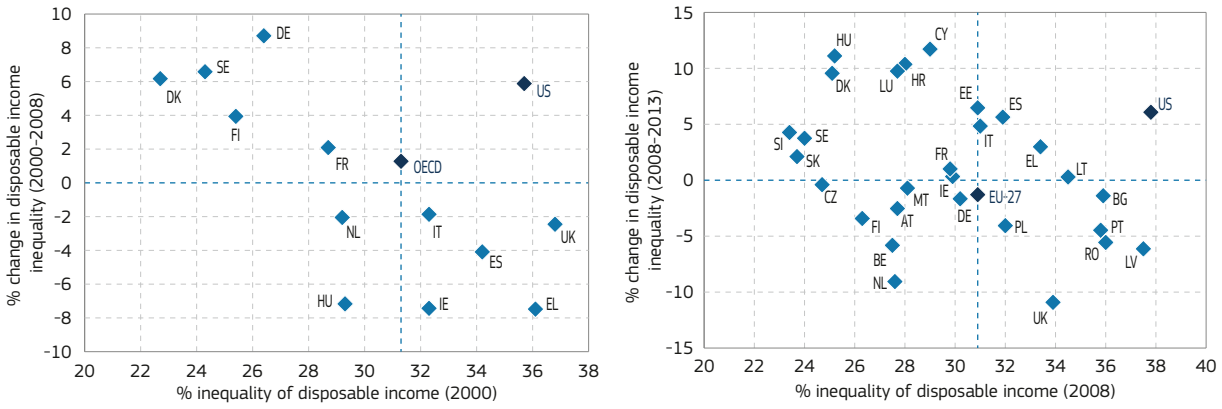
6.2. Unequal opportunities and rising market inequalities put a strain on welfare systems, especially in the countries hit hardest by the crisis

The previously observed convergence in the levels of income inequality across the EU stopped with the crisis. Before the crisis, EU inequality levels were converging as a consequence of both increasing inequality in low inequality countries (Germany, France and the Nordic Member States) and decreasing inequality in high inequality countries (Spain, Italy, Greece, and the United Kingdom). Inequalities started increasing again in Greece, Italy and Spain, while the rising trend observed in Germany and France was reversed or stopped after 2008. In the United States, inequalities are higher than in most EU countries and continued to increase during both periods (**Chart 35**).

In many countries, the change between 2007 and 2013 in the inequality in disposable incomes was primarily driven by the increase in market income ([24]) inequalities, which is measured before taking account of the redistributive effects of taxes and transfers (**Chart 36**). Between 2007 and 2013, labour market income inequality increased significantly in more than a third of EU countries.

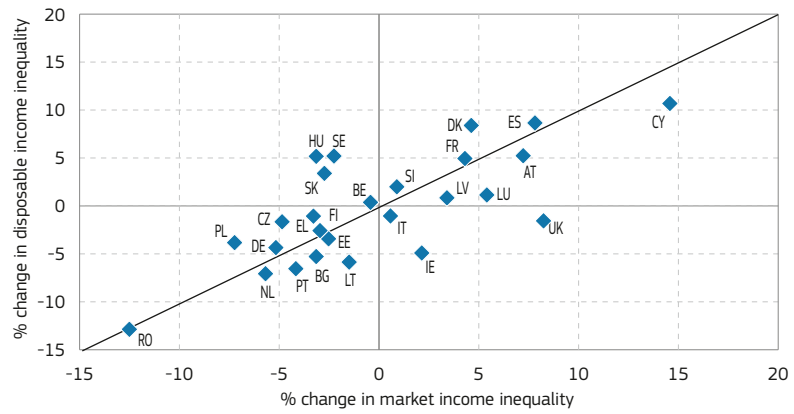
([24]) Market incomes refer to labour market income and to property income, before taxes and transfers.

Chart 35: Level and changes in disposable income inequalities before and during the crisis (between 2000 and 2008 and between 2008 and 2013). Gini Index



Sources: OECD for 2000-2008 and Eurostat EU-SILC for 2008-2013.

Chart 36: Change 2007-2013 in market income inequality (before taxes and transfers) vs. disposable income inequality – Gini coefficient



Source: Eurostat – EU-SILC EMPL calculations based on UDB.

The increase in labour market income inequalities reflects both the rise in unemployment (inequalities between those who work and those who do not work) and a polarisation of earnings of those in work (inequalities between those who work). In recent decades, labour markets have been transformed by globalisation, technological changes and regulatory reforms, all of which have had an impact on the distribution of earnings.

The OECD (2015)([25]) showed that, in almost all countries where labour income inequality increased, this was due to both rising unemployment and an increased dispersion of wages, with the exception of Portugal, Greece, Ireland and Belgium where the wage dispersion narrowed. In Portugal, Greece and Ireland, this resulted partly from cuts in public sector wages which had tended to be higher than those of the private sector.

The overall imbalance of earnings is largely due to a polarisation between highly-paid full time jobs and low-paid part-time jobs. The effect of the uneven distribution of jobs, in terms of hours worked and wage levels, is compounded at household level by the increase in the number of couples in the same wage category.

Despite the long-term progress made in improving opportunities for all, notably by promoting universal access to education and health care, improvements in living standards (e.g. as measured by median income and material deprivation rates) have stalled, and socio-economic status remains one of the main determinants of educational and health outcomes. Gender gaps continued to reduce during the crisis but remain significant and hinder the efficient allocation of human capital. Ensuring access for all to quality services and promoting gender equality is essential to enhancing the quality of human capital and social mobility (e.g. the opportunity that individuals have to acquire better education when parents had lower education or to move up the income scale).

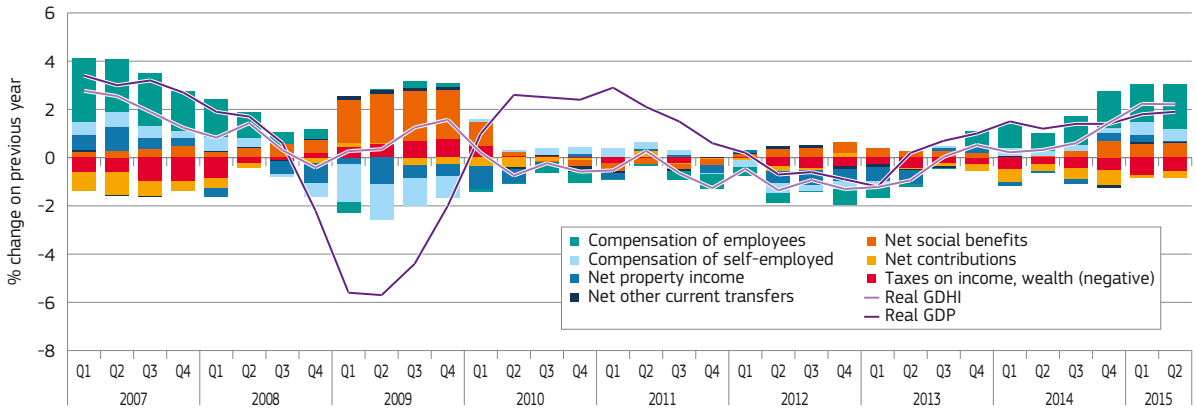
7. Social protection systems in the EU

7.1. Social protection expenditure grew more strongly in 2014 in most EU countries, after the slow growth in 2013 and the 2010-2012 decline

While social protection expenditure played a major role in stabilising incomes in 2009, the 2012 decline in real terms was pro-cyclical and the subsequent increase in 2013 was relatively weak and provided little support in terms of income stabilisation (**Chart 37**). In 2009, real expenditure grew for all expenditure categories: not only for unemployment, social exclusion and housing, and family benefits, as perhaps expected in the context of an economic recession, but also pensions and health care which increased at a faster rate than in previous years. The 2012 decline in real expenditure affected all expenditure categories except pensions. Unemployment-related expenditure, for example, continued to decrease following

([25]) See OECD, In It Together: Why Less Inequality Benefits All, 2015. At http://www.oecd.org/social/in-it-together-why-less-inequality-benefits-all-9789264235120-en.htm.

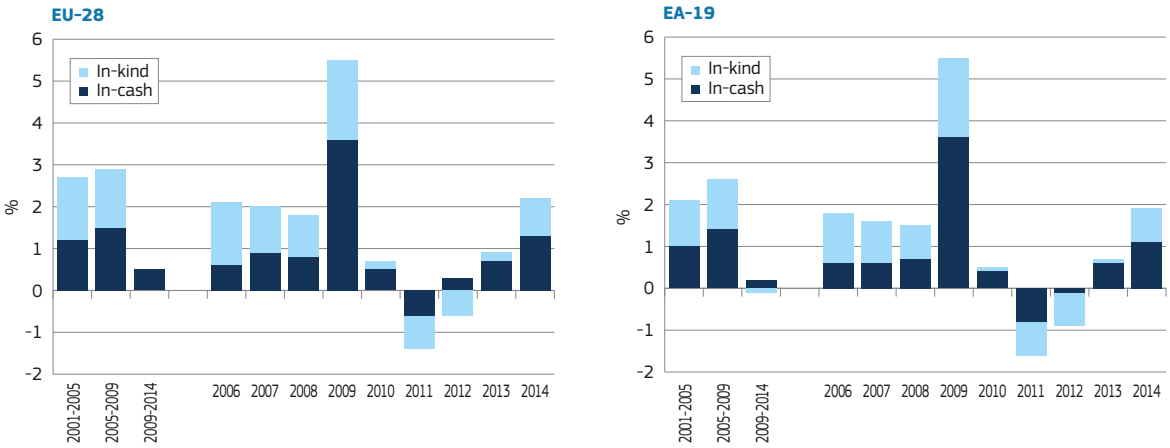
Chart 37: Gross Household Disposable Income (GHDI) developments in the EU (2000-2015)



Sources: ECB and Eurostat.

Notes: Annual percentage change and percentage point contributions. Labour income includes compensation of employees and gross operating surplus and mixed income (compensation of self-employed).

Chart 38: Breakdown of the annual change in real public social expenditure between the contributions from in-cash and in-kind benefits (2001–14) in the EU-28 and EA-19



Source: Eurostat (NA and DG EMPL calculations).

Notes: The values for 2014 are an estimate based on national accounts. When no data are available in the National Accounts (annual), the data were either based on National Accounts (quarterly) or the AMECO database (in the latter case by usually applying calculated growth rates to the data available from National Accounts (annual).

the strong decline observed in 2011 and despite the increase in unemployment. This evolution contrasts with the strong growth in unemployment expenditure recorded in 2008 and 2009, also following the increase in the number of unemployed persons. In 2014, however, social protection expenditure did start to grow again at a pace closer to its long-term trend (see the chapter on social protection for more detailed information on the developments and reforms of social protection systems).

In 2014, work incomes started to increase, reflecting the improvement of labour market conditions. Social benefits ([26]) also continued to increase slightly in comparison to 2013. The latter may be related to the use of indexation mechanisms linked to 2013 inflation rates which were higher than in 2014 (**Chart 37**). The first two quarters of 2015 show a continued improvement in Gross Household Disposable Income, also supported by work income and social benefits.

In 2014, while the economic environment improved, both cash and in-kind expenditure increased in the EU and the EA at a faster pace than in 2013 (**Chart 38**). However, the increase of in-kind benefits in 2014 only partially compensated for the declines observed between 2010 and 2012. Most Member States registered similar increases, except for Ireland, Greece, Spain, Cyprus, Croatia and Slovenia where in-kind benefits continued to decline.

([26]) Social protection expenditure generally helps to stabilise the economy in bad economic times, since social benefits partly compensate for the decline in households' market income. Unemployment benefits typically have a stabilising function, as do means-tested benefits of various sorts (typically social exclusion, family or housing). Health and pensions expenditure play a role too, but generally to a lesser extent (since they do not respond directly to a decline in market incomes).

Changes in the tax-benefit system over the period 2008-2014 had a strong impact on household incomes across the Member States ([27]). In some countries, the measures adopted since 2008 have led to a strong reduction in household incomes (-17% in Greece, -4.5% in Latvia, and around -4% in Italy and Estonia), even if the impact was generally greater on high incomes than on low incomes. More recently, in most of the Member States assessed, the measures adopted in 2013-2014 had a positive overall impact on incomes and in most cases were more beneficial to lower income groups. It can be noted that, in countries that experienced a similar average impact on household incomes, the distributional impact of measures over the period 2008-2014 varied between lower and higher income groups, highlighting the importance of the design of measures in terms of policy outcomes.

8. The economic crisis impacted on social dialogue practices in different ways across the EU

Social dialogue is seen to make labour markets more dynamic and inclusive by enabling workers and employers to better balance their interests in order to identify win-win solutions. Social partners engage in discussions at different levels and promote their joint work through different channels, in line with national practices and traditions. Through collective bargaining, workers and management may negotiate working conditions at company, sector or national level (including coordination between these levels and units at a given level).

In several Member States (for example Belgium, France, Germany, Italy, the Netherlands and Romania), social partners manage "paritarian" funds to promote skills development or occupational health and safety, or co-manage certain aspects of social security systems. Moreover, social partners can play an important role in the design and implementation of policies and reforms. Governments may consult social partners on policy orientations, drawing on their expertise in employment matters. Public authorities can negotiate with social partners to reach joint decisions. Moreover, the state can also provide institutional and financial support to social partners' bipartite agreements.

There are several examples where social dialogue contributed directly to job preservation during the recent economic crisis. The initial stages of the crisis mainly affected the private sector where, in some Member States (such as Austria, Germany, the Netherlands and Poland), the social partners, often supported by public authorities, agreed on internal flexibility measures such as short-time working schemes. These discretionary measures, in combination with the effects of automatic economic stabilisers (such as unemployment insurance, including those co-designed or co-managed by social partners) helped to contain many of the negative effects of the economic shock on employment and living standards.

Over the medium term, social dialogue is seen to contribute to employment growth, with the information and consultation of workers at company level having a positive effect on staff performance and productivity, as well as the competiveness and reputation of the companies. At macro-level, transparent working conditions and regulations designed and implemented with support from both sides of industry are also seen to create a stable and predictable climate for investment.

Social dialogue contributes to the improvement of working conditions. Joint actions and measures designed, or co-designed, by social partners facilitate the identification of skills needs, job matching and lifelong learning that enhance job quality. Social partner agreements promote occupational health and safety, working time or reconciliation of work and family life. This includes EU-level agreements, implemented by directives or autonomously by social partners in accordance with national practice.

However, maximising the benefits of social dialogue depends crucially on enhancing the capacity of the social partners as well as developing their involvement in the design and implementation of policies and reforms. In countries where social dialogue needs to be reinvigorated (in particular in a number of Central and Eastern European countries) or in those where it has been weakened due to the economic and financial crisis (Greece, Ireland, Portugal, Spain and Cyprus), efforts to build and develop the capacity of social partners to make an essential contribution to the recovery are thus seen to be priority areas of policy action and intervention.

([27]) De Agostini, P., Paulus, A. and Tasseva, I., The effect of tax-benefit changes on the income distribution in 2008-2014, Euromod Working Paper Series, EM 11/15, 2015.