

Articles

What is behind the recent rebound in euro area employment?

Euro area headcount employment has increased by over 2.2 million since the post-crisis low in the middle of 2013. This article investigates the sources and characteristics of this rebound, finding that it is heavily concentrated in some of the worst-hit labour markets, to a considerable extent in low productivity sectors. While most of the net employment created over recent quarters has been high-skilled, full-time and waged (as opposed to self-employment), slightly more than half is based on temporary contracts. Part-time work also features strongly in several economies. Women and older workers in particular have benefited from the increase, reflecting longer-term trends in euro area employment developments.

1 Introduction

After almost five years of virtually uninterrupted employment losses amounting to over 5.5 million people, euro area employment stabilised in the second quarter of 2013 and has since increased by over 2.2 million.

Although this increase provides a much-needed boost to euro area labour markets, employment remains some 2% below its level before the recent economic crisis.

This article investigates the sources of the increase in employment seen across the euro area since the post-crisis low in the middle of 2013, focusing in particular on developments in the largest euro area economies. In the absence of up-to-date data on employment flows,¹ the article examines the features behind the recent rebound in employment levels, in order to provide insights into the changing composition of employment. Section 2 provides an overview of employment developments across the euro area, examining the drivers of the recent increases at the national level. Box 1 compares post-crisis employment developments in the euro area and the United States. Box 2 looks at the impact of recent structural reforms on employment developments in some of the labour markets worst hit by the economic crisis. Section 3 examines the sectoral distribution of the rebound in euro area employment. Section 4 examines the worker and job characteristics of the employment created. Section 5 concludes with policy recommendations.

¹ The latest EU statistics directive foresees the release of these data by the end of 2017, though some Member States envisage earlier publication on a voluntary basis.

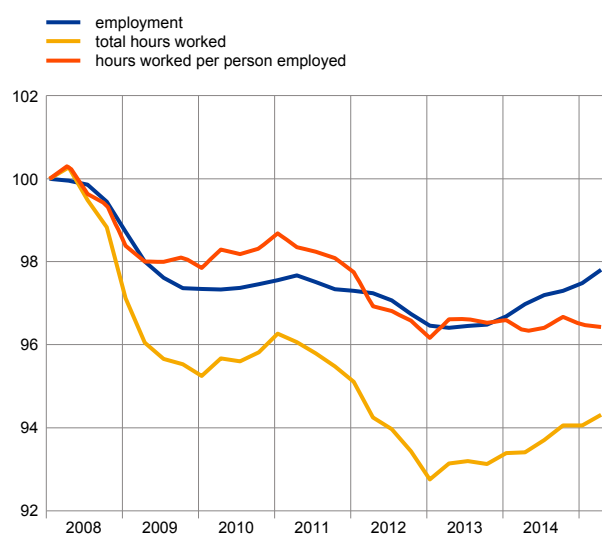
2 Recent euro area employment developments

Over the course of the economic crisis between the second quarter of 2008 and the first quarter of 2013, euro area employment levels fell by almost 4% from their pre-crisis peak (see Chart 1), reflecting a decline of more than

Chart 1

Euro area employment and hours worked since the start of the economic crisis

(index: Q1 2008=100)



Sources: Eurostat and ECB calculations.

5.5 million in headcount employment. Total hours worked fell even further, however, and remain around 6% below their pre-crisis peak more than seven years later, reflecting considerable labour shedding and a marked and persistent reduction in hours worked per person. The stronger decline in hours worked in part reflects the changing sectoral composition of employment (see Section 3).

Since hitting a post-crisis low in the second quarter of 2013, euro area employment has shown continued quarter-on-quarter expansion: by the summer of 2015 an additional 2.2 million people were employed across the euro area. If the current rates of employment growth (of just under 0.2% quarter on quarter since the start of the rebound) continue, euro area headcount could reach pre-crisis levels by the middle of 2018. Nevertheless, the employment recovery seen in the euro area to date has been considerably more muted than the marked expansion in US headcount (see Box 1).

Box 1

A tale of two crises: recent developments in euro area and US employment

The crisis took a heavy toll on employment levels in both the euro area and the

United States. At their worst points, the United States lost almost 8 million jobs (i.e. around 5.5% of the total prior to the recession), while euro area lost around 5.5 million (almost 4%). Chart A shows that the cyclical dynamics of euro area and US employment after the start of the 2008-09 recession (which began one quarter earlier in the United States than in the euro area) were rather different.² After a much swifter and stronger decline in the immediate aftermath of the recession, US employment has rebounded strongly since the start of 2011. More than 10 million jobs have been created, thus outstripping pre-crisis employment levels by almost 2%. In the euro area on the other hand, headcount employment remains 2% below pre-crisis levels, following a more protracted crisis period which included the global recession and a second euro area recession between the fourth quarter of 2011 and the first quarter of 2013. This is despite the addition of 2.2 million jobs observed since the employment trough, which was only reached in the middle of 2013.

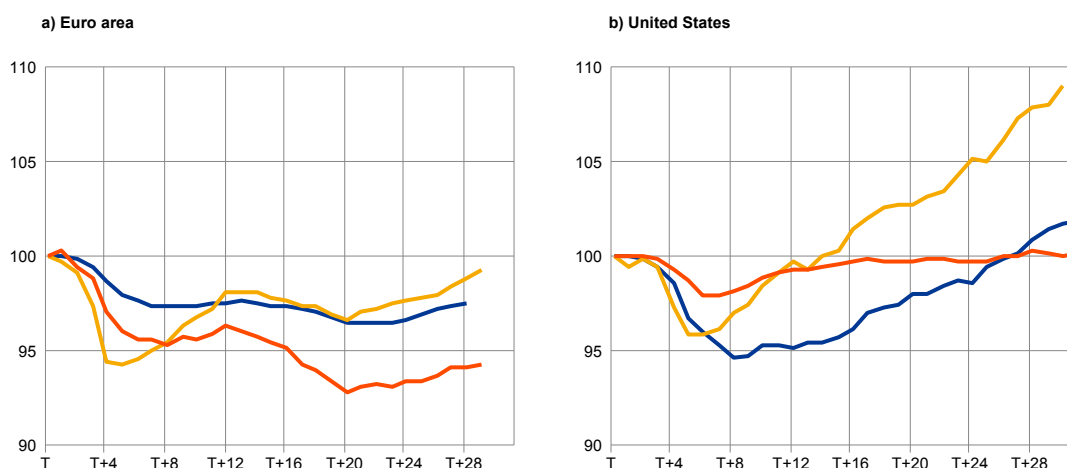
² US employment data refer to the total number of jobs held (and thus may include a small proportion of people with more than one job). For the euro area, data refer to total headcount employment.

Chart A

Development of employment and average weekly hours since the onset of the global recession in 2008

(pre-crisis peak in GDP=100; quarters since GDP peak (T))

— employment
— GDP
— average weekly hours per person employed



Sources: Eurostat, US Bureau of Labor Statistics and ECB staff calculations.

Notes: The euro area pre-crisis peak in GDP was in the first quarter of 2008 and the US peak in the fourth quarter of 2007. For the United States, average weekly hours per person refers to total private industries.

The stronger labour market reaction seen in the United States is not a reflection of a sharper cyclical downturn. In fact, real GDP declined more strongly in the euro area as a result of the global economic and financial crisis than in the United States, with output falling by 5.8% peak-to-trough in the euro area, compared with 4.2% in the United States. In part, the more muted headcount adjustment seen in the euro area, particularly over the course of the 2008-09 recession, is likely to reflect the greater emphasis placed on adjustments to average working hours.³ Chart A shows that average weekly hours per person declined more sharply in the euro area than in the United States following the onset of the 2008-09 recession, and are still far below pre-crisis levels.

Different labour cost dynamics in the euro area and the United States are likely to have contributed to the different developments in employment (see Chart B). Euro area labour costs rose strongly in the first part of the crisis on the back of contracting productivity, reflecting stronger labour hoarding than in the United States. Wage growth in the euro area (as measured by the annual growth rate of compensation per employee⁴) has averaged around 1.9% since the onset of the global recession – albeit with some slowing in the rate of growth following the start of the second euro area recession in the fourth quarter of 2011 – compared with 2.3% in the United States. Taken together with the impact of adverse productivity developments as a result of

³ In both economies, firms responded to the recession by reducing employees' average working hours. However, in the United States this effect was dwarfed by the much greater contribution of job shedding to the reduction in total hours worked, while in the euro area (particularly in the industrial sector) a greater proportion of the reduction in total hours worked was achieved through reductions to the average weekly hours of employees – often as a result of publicly-funded short-time working schemes. See also the box entitled "Labour market developments in the euro area and the United States since the beginning of the global financial crisis", *Monthly Bulletin*, ECB, August 2013.

⁴ Profiles are similar regardless of whether persons employed or hours worked are used.

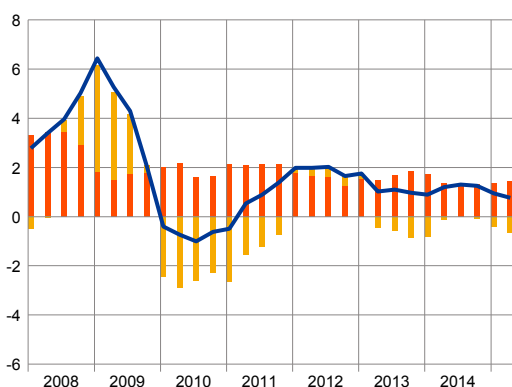
Chart B

Development of labour costs, productivity and compensation since the onset of the global recession in 2008

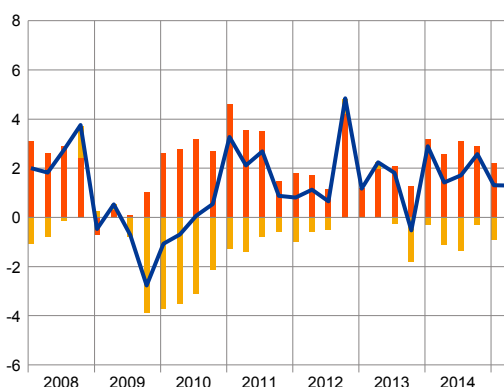
(annual percentage changes; inverted productivity data)

— unit labour costs
— productivity per person employed
— compensation per employee

a) Euro area



b) United States



Sources: Eurostat, US Bureau of Labor Statistics and ECB staff calculations.

Notes: The euro area pre-crisis peak in GDP was in the first quarter of 2008 and the US peak in the fourth quarter of 2007. Productivity growth is inverted, since positive productivity growth helps contain unit labour cost growth.

strong labour hoarding (particularly at the beginning of the crisis) however, this helps to explain the stronger overall growth in unit labour costs in the euro area since the onset of the crisis. Unit labour costs have increased on average by around 1.7% year-on-year in the euro area, compared with

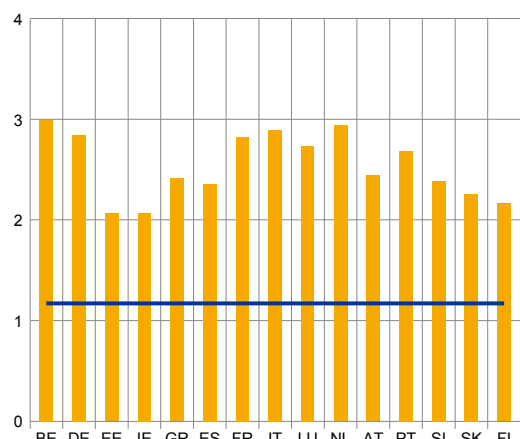
1.3% in the United States. Meanwhile, in the United States, stronger growth in compensation per employee has been offset to a greater extent than in the euro area by stronger productivity developments, which have helped contain growth in unit labour costs.

Chart C

Levels of employment protection

(six point scale, 0 = least restrictive, 6 = most restrictive)

— EPL for permanent workers in the United States
— EPL for permanent workers across euro area countries



Sources: OECD and ECB calculations.

Notes: EPL summary indicators are from the 2013 update to the OECD/IDB Employment Protection Database. Data for Slovenia refer to 2014. Cyprus, Latvia, Lithuania and Malta are not shown, owing to a lack of EPL data. "EPL for permanent workers" refers to the degree of protection afforded to (and dismissal costs for) workers on permanent (open-ended) contracts against individual and collective dismissal. A similar picture emerges when coverage for temporary workers is considered (although the differential is greater still).

Institutional factors are also likely to explain part of the markedly stronger rebound in employment seen in the United States since the global recession. In addition to the widely-cited greater reliance on publicly-supported short-time working in the euro area, employment protection legislation (EPL) afforded to US workers is markedly weaker than that given to euro area workers. Using the OECD summary indicators of EPL for the 15 euro area countries for which data are available, Chart C shows that even the euro area countries with the lowest levels of EPL (Estonia, Ireland and Finland) offer considerably more protection to permanent workers than the United States. The EPL metric

of these three euro area countries falls just outside one standard deviation away from a synthetic euro area average, while for the United States it falls three standard deviations away.⁵ EPL is likely to dampen the employment response during temporary downturns. However, if it impedes firm-level restructuring in the face of longer-lasting changes in activity or reduces firms' incentives to hire (owing to potentially high costs of adjustment⁶), EPL may prolong the adjustment period, resulting in a slower and lower rebound in aggregate employment.

In the euro area, the stronger employment protection given to workers and broader reliance on job-saving short-time working schemes helped dampen the loss of employment during the early phase of the crisis. However, high levels of EPL and the protracted use of short-time working in some euro area economies may have also slowed labour market adjustment in the euro area⁷ and further hindered the structural reallocation of labour towards stronger growing firms and sectors in the recovery.⁸

Overall, the typically more flexible US labour market helped to bring about considerably faster employment adjustment over the crisis and a more rapid rebound in employment growth than that seen in the euro area. The swifter post-crisis adjustment in the United States appears to reflect the combination of the stronger and faster rebound in economic activity, proportionally smaller adjustments in hours worked per employee, the lower level of employment protection and a stronger contribution of productivity developments as a means of containing labour cost growth. Consequently, US employment is now 2% above its pre-crisis levels, weekly hours per person have started to rebound and labour cost growth remains contained.

Two large euro area economies – Germany and Spain – have contributed almost two-thirds to the total increase in euro area headcount since the second quarter of 2013 (see Chart 2 and Table 1), with increases in employment levels of 592,000 and 724,000 people respectively. This reflects more than large country effects – over the same period, employment levels in France and Italy rose by only 190,000 and 127,000 people respectively, accounting for around 15% of the total euro area increase. The other countries contributed a further 252,000 in total, following strong cyclical rebounds in employment in many of the countries hardest hit by the crisis.

A notable feature of the recent rebound has been the marked increases in employment in several of the formerly stressed economies, where employment had been particularly hard hit by the crisis. While, in terms of net job creation, the

⁵ Similar results can also be arrived at using EPL for those employed on temporary contracts, despite considerable cross-country heterogeneity and marked efforts to improve employment flexibility in many euro area countries in recent years.

⁶ See Blanchard, O. and Wolfers, J., "The Role of Shocks and Institutions in the Rise of European Unemployment: The Aggregate Evidence", *The Economic Journal*, Vol. 110, No 462, Conference Papers, 2000, pp. C1-C33.

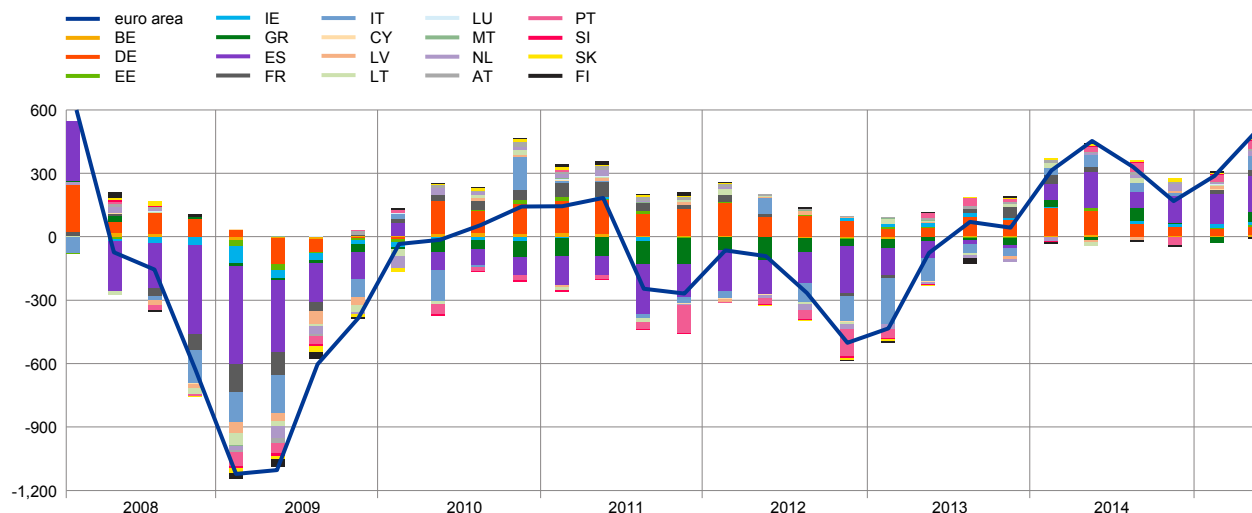
⁷ As suggested by Mario Draghi in his speech, "Unemployment in the euro area" at the Federal Reserve Bank of Kansas City Economic Policy Symposium, Jackson Hole, 22 August 2014.

⁸ See, for instance, Bartelsman, E.J., Gautier, P.A. and de Wind, J., "Employment Protection, Technology Choice, and Worker Allocation", *De Nederlandsche Bank Working Paper*, No 295, May 2011.

Chart 2

Evolution of euro area headcount and country contributions since the start of the economic crisis

(quarter-on-quarter changes in thousands)



Sources: Eurostat and ECB calculations.

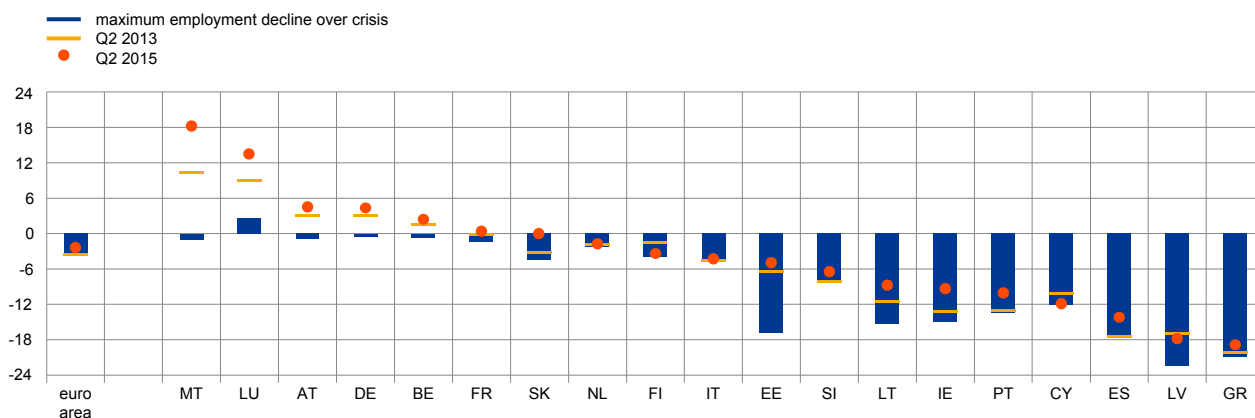
Note: The crisis begins after the euro area peak in GDP.

recent rebound in Spain appears particularly strong (generating just over one-third of the total euro area increase observed between the second quarters of 2013 and 2015),⁹ the headcount increase offsets less than one-fifth of the total employment loss incurred over the course of the crisis in that economy (see Chart 3).¹⁰

Chart 3

Deviation of employment from its pre-crisis peak and changes since the second quarter of 2013

(percentage deviation from pre-crisis peak in employment; countries ranked by size of rebound by Q2 2015)



Sources: Eurostat and ECB calculations.

Notes: Pre-crisis peaks are country-specific and lie between the first quarter of 2007 and the second quarter of 2009, to allow for an earlier or lagged impact of crisis. The latest data for Luxembourg refer to the first quarter of 2015.

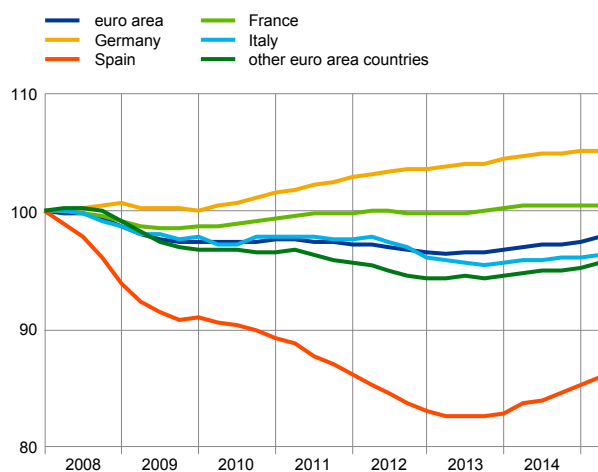
⁹ As such, the recent Spanish expansion outstrips even the strong net increase observed in Germany over the same period, despite the considerable difference in size between the German and Spanish labour markets. Germany's labour force and working age population are around double the size of Spain's.

¹⁰ See, for example, the article entitled "The impact of the economic crisis on euro area labour markets", *Monthly Bulletin*, ECB, October 2014.

Chart 4

Employment developments in selected euro area countries

(index: Q1 2008=100)



Sources: Eurostat and ECB calculations.

Note: The latest observations are for the second quarter of 2015.

As well as Spain, the euro area employment rebound has also been boosted by significant headcount increases in Ireland, Greece and Portugal. Together, these three economies have

contributed around 15% of the growth in euro area headcount seen since the second quarter of 2013. This magnitude is similar to the combined rise generated by the two much larger economies of France and Italy over this period, albeit following very different employment growth profiles over the course of the crisis.

Chart 4 shows distinct employment profiles for the four largest euro area economies since the start of the crisis. Whereas German headcount has increased almost uninterrupted since the onset of the recession in 2008, Spain suffered ongoing job losses until the recent turnaround. Consequently, employment in Germany is now 5% above pre-crisis levels (outpaced only by Luxembourg and Malta), while in Spain it remains 15% below its pre-crisis peak despite the recent strong recovery. In France, headcount has surpassed pre-crisis levels slightly, in large part supported by considerable increases in public sector employment (see Table 1). In Italy, the crisis has had a significantly more persistent adverse impact on total employment, which has remained largely unchanged, in contrast to both aggregate euro area developments and those in many of the smaller euro area economies.

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Box 2

Labour market reforms in Ireland, Spain and Portugal

This box takes stock of the main labour market reforms undertaken in Ireland, Spain and Portugal in the period 2011-14. In all three countries – and particularly in Spain and Portugal, which had more rigid labour markets than Ireland – the reforms were designed to improve the functioning of labour markets and enhance employability.

Although it is not yet possible to draw firm conclusions, these reforms may be linked to the recent positive labour market developments observed in these countries, as reflected in the swift reaction of employment and unemployment to GDP growth (see chart).

Nevertheless, some of the pre-crisis problems in Spain and Portugal still largely persist, for example significant labour market segmentation, evidenced by the larger share of temporary jobs among the employment created. At the same time, the unemployment level remains very high. While the current signs of employment recovery are encouraging, further policy actions are needed in these countries to address the remaining rigidities and inefficiencies.

Ireland

The reform effort in Ireland over this period had two main aims: improving the efficiency of the wage-setting system and strengthening active labour market policies.

The reform of the collective bargaining system mostly concerned the revision of regulations setting minimum wages and working conditions in some sectors by means of Employment Regulation Orders (EROs) and Registered Employment Agreements (REAs). The reform streamlined the number of sectoral minimum wages and limited their scope of application. It also increased the adaptability of the agreements to changing economic conditions. These reforms were overtaken by judicial developments in 2011 and 2013, when EROs and REAs were ruled unconstitutional.

Active labour market policy measures were implemented with a view to improving activation of the unemployed and increasing employability. The objectives of the measures included better profiling of the unemployed. A single point of contact for all employment and income support matters was created in 2012 and this scheme has since been gradually rolled out.

Compared with Ireland, the reform efforts of Spain and Portugal encompassed a much larger spectrum of labour policies, which was necessary in order to address significantly greater inefficiencies and rigidities in the labour market. In Spain and Portugal, labour market reforms were mainly aimed at improving hiring on open-ended contracts, increasing efficiency in the collective bargaining system, increasing working time flexibility, strengthening active labour market policies and reducing distortions in the unemployment benefits system.

Spain

Many measures designed to facilitate hiring on open-ended contracts were introduced in Spain. The definition of fair dismissal for economic reasons was clarified, and collective dismissals were eased by eliminating prior administrative authorisation. Severance payments for those on permanent contracts were also reduced. The maximum duration of fixed-term contracts was reduced and a new type of employment contract with a one-year trial period was introduced. To address segmentation and improve hiring on open-ended contracts, temporary fiscal measures were introduced. In 2014 the government introduced a flat rate of €100 for employers' social security contributions for all new employees on permanent contracts, subject to net job creation. In 2015 a new measure replaced the flat rate, which exempts the first €500 earned from employers' social security contributions.

Working time flexibility was improved by removing the administrative authorisation needed to reduce working time for technical, economic and organisational reasons. Measures were also introduced to allow a more irregular distribution of working hours throughout the year.

The reform of the collective bargaining system removed the favourability clause in higher-level collective agreements. Firm-level collective agreements were given priority over any sectoral or regional agreements. The reform also widened the applicability of opt-out clauses from a sectoral agreement and discontinued the indefinite survival of collective agreements that had expired but were not renewed (*ultraactividad*).

In terms of active labour market policies, job search conditionality was strengthened and access to apprenticeship contracts was made easier. Temporary work agencies were allowed to work as recruitment and placement agencies. Financial assistance to the long-term unemployed was increased and activation enhanced. Employment measures were implemented to facilitate employment on open-ended contracts.

Portugal

The strictness of employment protection legislation was reduced by cutting severance payments and relaxing the definition of individual dismissal. The definition of legal dismissal based on economic reasons and competency was also relaxed. Severance payments were reduced, with accrued rights being protected in order to limit potential negative effects of the reform during the crisis.

The level of unemployment benefits was reduced, while coverage was increased in order to strengthen social safety nets.

Working time flexibility was enhanced by reducing overtime premiums and introducing time accounts agreed between employer and employee. Working time was increased by eliminating four national holidays and three annual leave days, which were previously accumulated on the basis of a low absence record.

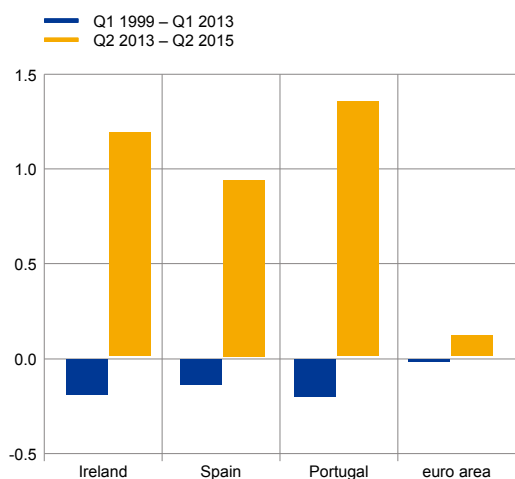
Wage-setting measures were implemented in 2012 and 2014. Extensions of collective agreements were limited in 2012 by the introduction of a representativeness criterion that had to be fulfilled for an agreement to be considered for extension. Other measures implemented in 2012 to promote collective bargaining at the firm level include the possibility for sectoral collective agreements to set out the conditions under which deviations from the agreement can occur at the firm level, and the widening of the scope for unions to delegate to works councils the possibility of concluding collective agreements. In 2014 the survival of collective agreements was shortened. The measures concerning extensions of collective agreements were partly reversed in 2014.

Measures to revamp the role of public employment services and improve the effectiveness of active labour market policies were also implemented. Training programmes were streamlined, focusing on short-term modules and covering more unemployed people. Hiring incentives were introduced and internship programmes were created to support the employment of young people.

Chart

Residuals from the relationship between changes in the employment rate and GDP growth before and after the crisis

(residuals)



Sources: Eurostat and ECB calculations.

Note: Based on a static relationship between changes in the employment rate and percentage changes in GDP for the period between the first quarter of 1999 and the second quarter of 2015.

Overall, these measures show that reform efforts in these three countries were significant, particularly in Spain and Portugal.

It is likely that the implemented measures are having an impact on the pace of employment creation. The chart shows that the residual of a simple employment rate and GDP regression was largely positive on average between the second quarters of 2013 and 2015. While it is not possible to draw any firm conclusions from this partial analysis, the large positive residual could be linked to some extent to the impact of the reforms. At this point in time, what appears important is that implementation of reforms continues apace. The impact of labour market reforms should be significant in the medium term if further policy measures, in particular those which address segmentation and remaining distortions in wage setting, continue to be implemented in a credible and irreversible manner.

3 Sectoral drivers of the employment increase

By far the largest sectoral contributor to the euro area's overall employment increase since 2013 has been the services sector. The market services sector alone has added over 1.5 million to total euro area employment (see Table 1). The

Table 1

Breakdown of euro area net employment creation by sector and country from the second quarter of 2013 to the second quarter of 2015

(thousands)

	euro area	Germany	Spain	France	Italy	other euro area countries
Net change	2,158.0	592.0	724.0	190.0	127.0	525.0
<i>as a percentage of the euro area increase</i>	100.0	27.4	33.5	8.8	5.9	24.3
Industry excluding construction	68.3	58.0	90.0	-71.6	-39.4	31.3
Construction	-84.3	2.0	49.0	-81.3	-42.0	-12.0
Market services	1,541.6	317.0	458.0	118.6	116.0	532.0
<i>of which:</i>						
Trade and transport	623.8	128.0	302.0	17.1	-50.8	227.5
ICT services	69.0	-13.0	8.0	6.0	12.7	55.3
Finance and insurance	-63.1	-8.0	-11.0	8.3	-10.3	-42.1
Real estate	38.9	7.0	16.0	-4.1	7.7	12.3
Business services	873.0	203.0	143.0	91.3	156.7	279.0
Non-market services	441.9	206.0	102.0	190.2	-5.3	-51.0
Other services	151.9	21.0	35.0	20.1	66.9	8.9

Sources: Eurostat (national accounts data) and ECB calculations.

dominance of market services is also evident at the national level, with the four largest euro area economies all showing strong headcount increases in this sector. Within the market services sector, the expansion has been heavily concentrated in the larger “business services” and “trade and transport” segments, where activity typically expanded somewhat earlier and more strongly than in other segments. Moreover, at the sub-sectoral level, there appear to be further marked differences in the demand drivers of the recent strong employment growth in Spain compared with Germany and, to a lesser extent, France and Italy. Spain’s expansion is concentrated more in the consumer-driven trade and transport segment (a pattern also seen in Estonia, Greece, Latvia, Lithuania and Portugal over the recent rebound), while expansion in the other large economies looks to be tilted towards the business-led, professional, technical and support services sub-sectors. Meanwhile, the finance and insurance sector – which was hit particularly hard over the course of the crisis – continues to act as a drag on euro area employment growth. The majority of countries, including three of the four largest, had lower employment levels in this sector in the second quarter of 2015 than in the second quarter of 2013, despite some small improvements in some countries over recent quarters.

The non-market services sector and the acyclical other services sector have also made significant contributions to the recent expansion of euro area employment. Increases in the largely publicly-provided non-market services sector (which includes defence, health and education and other public sector activities) account for around 15% of the total euro area headcount expansion seen since the middle of 2013, and have been particularly large in Germany and France. The change is notably smaller in Spain and even negative in Italy (as well as in Cyprus, Latvia, the Netherlands, Portugal and Finland), reflecting a stronger degree of fiscal consolidation and a reduction in public sector employment in these economies.

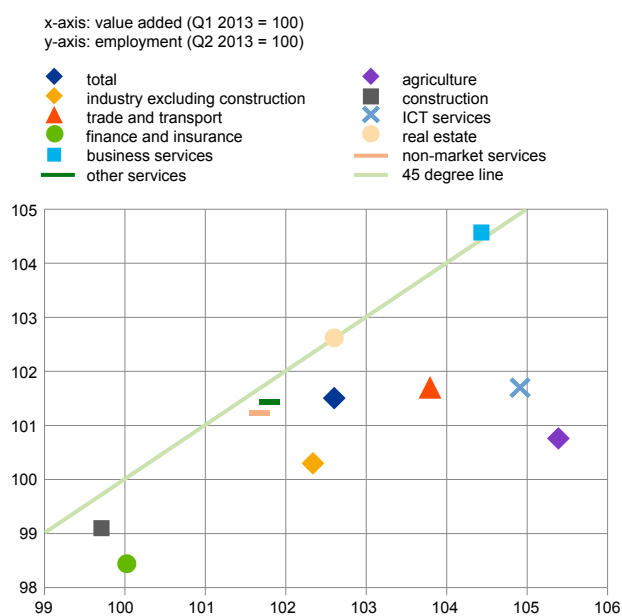
In the industrial sector (excluding construction), the headcount expansion seen over recent quarters marks a notable reversal of the longer-term downsizing seen before the crisis. At the country level, the rebound reflects a strong resurgence in Spain, while even the more modest increases in Germany more than offset ongoing declines in other euro area economies (including France and Italy, but also Belgium, Latvia and Finland to a marked degree). The Spanish recovery reflects a notable, but likely short-lived, rebound in industrial hiring following heavy downsizing in manufacturing segments over the course of the crisis.

Ongoing declines in employment in the construction sector at the euro area level obscure significant differences at the country level, partly related to the unwinding of earlier imbalances in the housing sector in some countries. To some extent, recent developments reflect a correction of markedly different country-level employment dynamics since the onset of the recession in 2008. The sharp expansion in employment in the construction sector seen in Spain over recent months is likely in part to reflect a strong cyclical rebound following five years of virtually uninterrupted job losses. Over the course of the crisis, construction employment in Spain declined by almost two-thirds. To a lesser extent, similar patterns are evident in Estonia, Ireland, Latvia and Lithuania, following smaller overall declines in construction employment in these countries over the course of the crisis. Conversely, in Germany – where until recently construction employment

Chart 5

Cumulative growth in euro area value added and employment from the second quarter of 2013 to the second quarter of 2015

(index: value added in Q1 2013=100; employment in Q2 2013=100)



Sources: Eurostat and ECB calculations.

had continued to grow virtually uninterrupted after only a brief contraction in 2008 – a levelling-off means that by the middle of 2015, it was broadly unchanged from its 2013 level. Meanwhile, at the aggregate euro area level, ongoing job losses in construction in some countries (most notably Belgium, France and the Netherlands) have more than offset the recent Spanish employment rebound in this sector, albeit to a declining degree in recent quarters.

The sectoral composition of the observed employment growth partly reflects the earlier and stronger growth in activity in the sectors which have driven the rebound.

Chart 5 shows the cumulative growth in sectoral activity (as measured by the increase in value added) between the post-crisis trough reached in 2013 and 2015, compared with cumulative employment growth over this period. Observations above 100 on the horizontal axis show sectors in which employment expanded (i.e. all sectors except construction, and finance and insurance, while employment in industry increased only modestly).

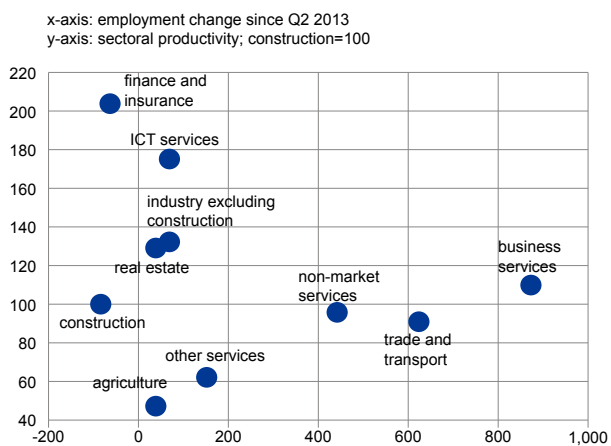
The heavy clustering of observations below the 45 degree line in part reflects an expected positive trend in

productivity growth, but is also likely to reflect the typical cyclical patterns seen in the aftermath of a recession – whereby firms may take some time to adjust their hiring strategies to match higher demand for output – as well as the reversal of earlier protracted periods of labour hoarding.

Chart 6

Changes in euro area employment by sector from the second quarter of 2013 to the second quarter of 2015 and relative productivity levels before the crisis

(change in employment in thousands; sectoral productivity index relative to construction)



Sources: Eurostat and ECB calculations.

Note: Productivity levels are averages for each sector between the first quarter of 2000 and the first quarter of 2008, according to data availability.

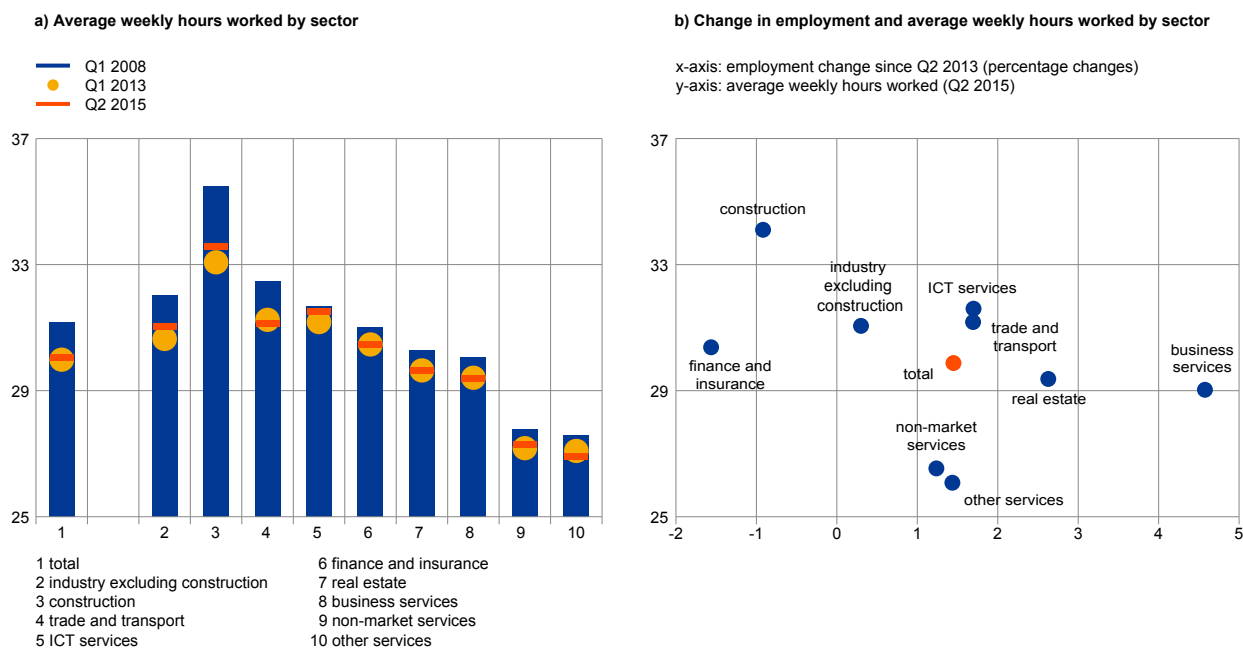
From a broader perspective, much of the recent employment growth seen across the euro area appears to have been concentrated in sectors with relatively low productivity levels (see Chart 6).

Comparing the expansion in employment by sector since the second quarter of 2013 with average productivity levels before the crisis (in order to abstract from artificially high productivity levels due to significant labour shedding in some sectors), Chart 6 shows that little of the recent increase in euro area employment has been concentrated in higher productivity sectors such as finance and insurance, or information and communication technology (ICT) services. Similar patterns are evident across most euro area economies. This pattern, which in many respects reflects the secular trend of structural change (towards a larger share of employment in services sectors) common to many advanced industrial economies, offers little prospect of a swift turnaround in the euro area's low productivity growth.

Chart 7

Variation in euro area average weekly hours worked over the crisis and in the post-crisis period

(average weekly hours per person employed)



Sources: Eurostat and ECB calculations.

Notes: Average weekly hours worked are shown at their pre-crisis peak in the first quarter of 2008 and post-crisis trough in the first quarter of 2013. Data for the agriculture sector are not shown, owing to a low degree of data reliability.

The significant sectoral changes observed over the course of the crisis also help to explain some of the marked reduction in total hours worked. As Chart 7 shows, average weekly hours worked by people in employment fell markedly (by around 4%) over the crisis period and have barely recovered since. Reductions were particularly large in the construction sector, as well as in the industry excluding construction and trade and transport sectors, where average weekly hours were typically higher than in other sectors of the economy (see Chart 7, panel a). However, the recent rebound in employment has tended to be strongest in sectors where weekly hours are typically lower than average (see Chart 7, panel b), leading to an ongoing sluggish recovery in total hours worked across the economy (see Chart 1).

4 Worker and job characteristics behind the rebound in employment

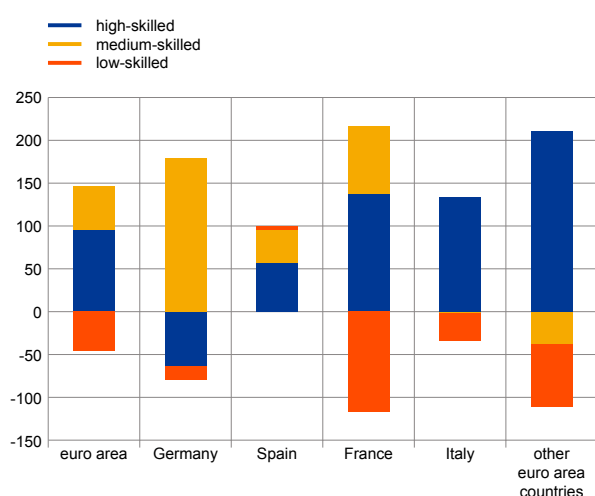
The majority of the net employment created across the euro area over the past two years has been concentrated among the higher-skilled, full-time and waged (as opposed to self-employed), with new temporary (i.e. limited duration) contracts slightly outnumbering permanent (i.e. open-ended) contracts – albeit with considerable cross-country heterogeneity (see Charts 8 to 13). Women and older workers have been the main beneficiaries of the recent

employment increases, in keeping with broader employment trends also seen before the crisis. Recent data from the EU Labour Force Survey suggest that over 2 million new high-skilled positions have been created over the past two years.¹¹ Full-time employment remains ahead of part-time employment in terms of net employment creation by a ratio of two to one. Temporary contracts are a larger contributor than permanent contracts to employment growth in the euro area (accounting for 52% and 48% of net employment creation respectively since the second quarter of 2013), but there are considerable cross-country differences. As discussed below, while

Chart 8

Net employment creation between the second quarter of 2013 and the second quarter of 2015 by level of skill

(percentages of total net employment increase)



Sources: Eurostat and ECB calculations.

Notes: Low, medium and high skill levels relate to the highest educational attainments of workers, where low-skilled refers to basic, if any, school-leaving qualifications; medium-skilled refers to higher secondary school qualifications (typically attained at ages 18-19); and high-skilled refers to tertiary (degree-level) qualifications.

declining overall at the euro area level, self-employment has become an important engine of job growth in some euro area countries.

According to the latest EU Labour Force Survey, much of the net euro area employment created in recent quarters has been concentrated among the higher-skilled and tertiary-educated, with a (further) marked decline among those with few or basic school-leaving qualifications (see Chart 8).

Increases in employment are strongly concentrated among the higher-skilled, often at the expense of the lower-skilled. This could be explained by a number of factors, not least ongoing structural changes in workplace demands necessitating higher skills as well as likely temporal variations in screening patterns among employers as skill levels increase among those seeking work.¹²

Germany is an exception to the broader euro area trend, with net employment growth tilted more towards medium-skilled workers. Recent employment patterns observed in Germany thus appear

to contradict prevailing notions of a “hollowing out” of middle-skilled jobs.¹³ However, they are likely in part to reflect the broader specialisation of the German economy in manufacturing (and thus a typically stronger reliance on intermediate craft and technician-level certification, as opposed to university-level qualifications), as well the greater prevalence of vocational education and training (via the dual system), which can provide an alternative entry route into many professional occupations in Germany.¹⁴

¹¹ Computed by applying the change in the shares of high, medium and lower-skilled workers between the second quarters of 2013 to 2015 to national accounts data on changes in employment levels.

¹² See, for example, Modestino, A.S., Shoag, D. and Ballance, J., “Upskilling: Do Employers Demand Greater Skill When Skilled Workers Are Plentiful?”, *Federal Reserve Bank of Boston Working Paper*, No 14-17, 2015.

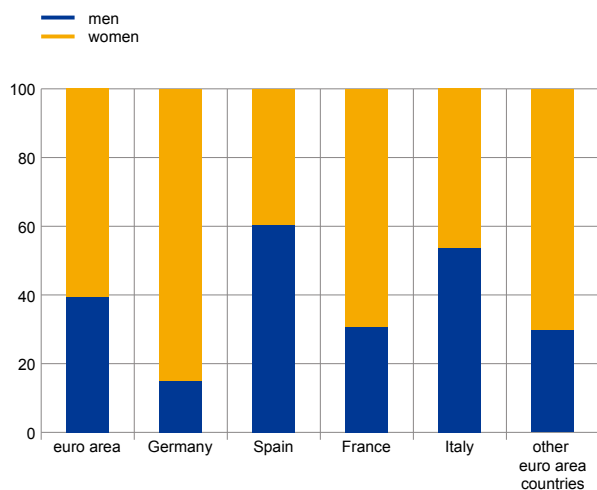
¹³ See, for example, Acemoglu, D. and Autor, D., “Skills, Tasks and Technologies: Implications for Employment and Earnings,” *Handbook of Labor Economics*, Vol. 4, Part B, 2014, pp. 1043-1171.

¹⁴ See Prais, S.J., *Productivity, education and skills: an international perspective*, Cambridge University Press, 1995, and Jarvis, V., O’Mahony, M. and Wessels, H., “Product Quality, Productivity and Competitiveness”, *NIESR Occasional Paper Series*, No 55, National Institute of Economic and Social Research, 2002.

Chart 9

Net employment creation between the second quarter of 2013 and the second quarter of 2015 by gender

(percentages of total net employment increase)

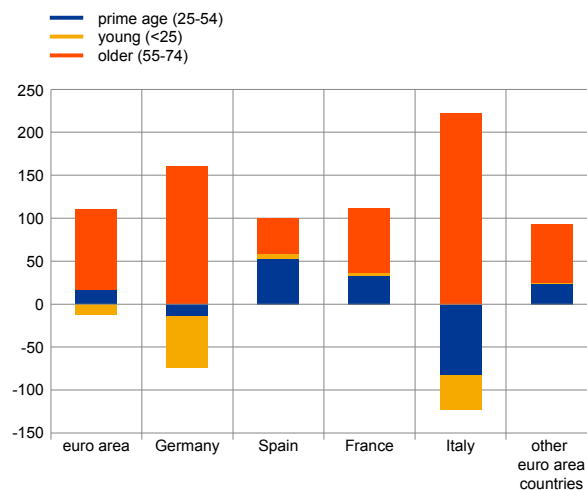


Sources: Eurostat and ECB calculations.

Chart 10

Net employment creation between the second quarter of 2013 and the second quarter of 2015 by age

(percentages of total net employment increase)



Sources: Eurostat and ECB calculations.

The recent growth in employment has been heavily concentrated among women and older workers (see Charts 9 and 10), in part reflecting longer-term trends in employment growth also seen before the crisis. The recently stronger increase in employment growth among women at the euro area level is broad-based and visible in all countries except Spain and Italy. In large part, this pattern reflects the ongoing secular rise in female participation in the labour market, which did not diminish over the crisis. It also in part reflects the concentration of recent employment growth in sectors which typically have higher proportions of women among headcount totals.

Significant ongoing increases in the employment of older workers have been noted throughout the crisis.¹⁵ The trend reflects several underlying factors, not least earlier structural reforms to pension and benefits systems designed to delay retirement ages, as well as changes in the composition of the group of older workers, with rising educational levels increasing the returns from longer working lives. In addition, recent developments may also reflect increased financial needs following losses in household wealth or income as a result of the financial crisis. Moreover, while younger workers were certainly severely hit over the course of the crisis, it is unclear to what extent recent modest declines in euro area employment of under 25-year-olds primarily reflect broader labour demand trends towards increased skill requirements, as outlined above, or secular supply-side trends towards younger cohorts staying in education for longer.¹⁶

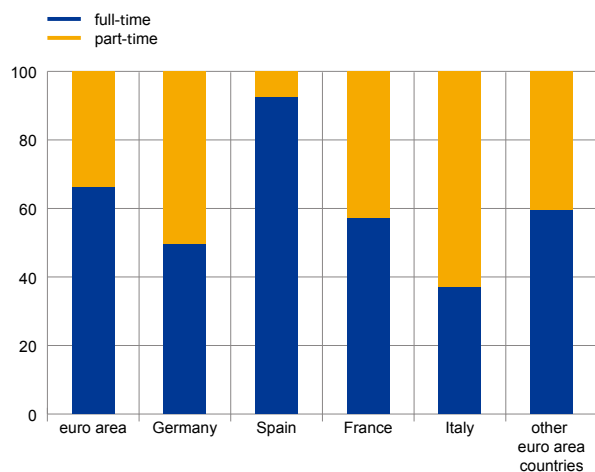
¹⁵ See, for example, the 2012 Structural Issues Report entitled "Euro area labour markets and the crisis", ECB, October 2012 as well as "All in it together? The experience of different labour market groups following the crisis", in *OECD Employment Outlook 2013*, OECD.

¹⁶ One conclusion which cannot be drawn from Chart 9 is that the low employment creation for young people seen over the past two years reflects a rationing of jobs in favour of older workers. Two recent careful microeconomic studies suggest that for many local labour markets, youth employment is often a complement to the additional employment of older workers. See, for instance, the box entitled "The lump of labour fallacy: a reassessment for the euro area" in "Comparisons and contrasts of the impact of the crisis on euro area labour markets", *Occasional Paper Series*, No 159, ECB, February 2015, and Böheim, R., "The effect of early retirement schemes on youth employment" *IZA World of Labor*, 2014: 70.

Chart 11

Net employment creation between the second quarter of 2013 and the second quarter of 2015: full and part-time employment

(percentages of total net employment increase)

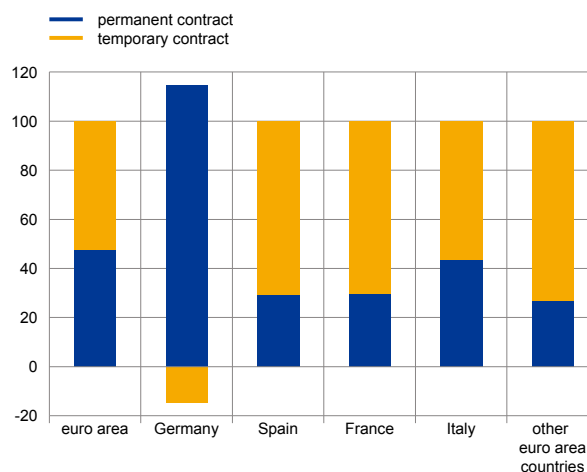


Sources: Eurostat and ECB calculations.

Chart 12

Net employment creation between the second quarter of 2013 and the second quarter of 2015 by contract status

(percentages of total net employment increase)



Sources: Eurostat and ECB calculations.

66% of the recent net euro area employment growth is a result of full-time employment, although cross-country differences are substantial (see Chart 11). The latest data show that between the second quarters of 2013 and 2015, full-time employment accounted for just under 50% of the total net headcount increase in Germany and 57% in France. In Spain it accounted for almost 93%, reflecting in part the proportionately stronger sectoral concentration of the employment increase in industry and construction. In Italy, around 63% of the (more modest) increase in headcount employment was due to a rise in part-time work. The proportions are notably higher in some countries – in particular Estonia, the Netherlands and Austria – where part-time job creation now contrasts with net declines in full-time jobs.

Cross-country heterogeneity is particularly evident in the mix of permanent and temporary jobs within the increase in employment. Chart 12 shows that while roughly equal proportions of the employment created over the period up to the second quarter of 2015 at the euro area level have been on permanent and temporary contracts (48% and 52% respectively), in France and Spain temporary contracts underlie around 70% of the net employment increases.¹⁷ The share of temporary contracts in new employment also exceeds the euro area average in Greece and Italy. Meanwhile in Germany (as well as Ireland, Austria and, to a lesser extent, Latvia and Lithuania), the past two years' employment growth has led to a marked increase in the number of people on permanent contracts, and even a modest decline in the total number of those with temporary contracts.

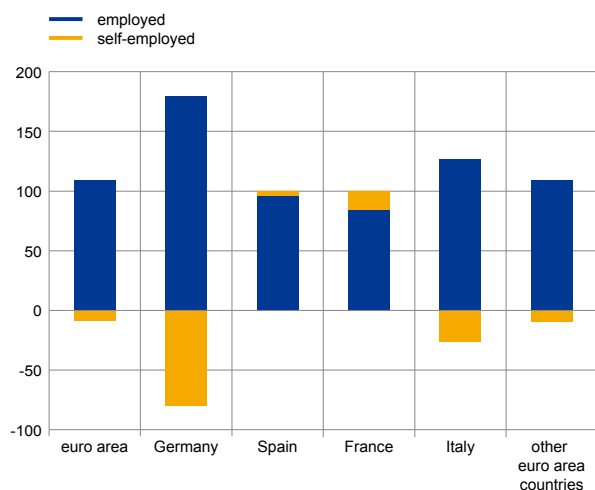
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¹⁷ In Slovakia the proportion is higher still, with all of the net employment growth seen since the middle of 2013 due to temporary contracts. While temporary contracts remain considerably more prevalent in Spain than in many euro area countries – at just under 24% of total employment, compared with around 15% on average for the euro area – their usage remains considerably lower than before the crisis, when they covered around one-third of total employment.

Chart 13

Net employment creation between the second quarter of 2013 and the second quarter of 2015: employment and self-employment

(percentages of total net employment increase)



Sources: Eurostat and ECB calculations.

According to the latest EU Labour Force Survey, self-employment has made a modest contribution to the recent employment expansion in some euro area economies, but has declined over the course of the rebound at the euro area level. While self-employment

has typically been slowly declining across the euro area since the onset of the recession in 2008 (to some extent reversing the modest positive growth seen before the crisis), it has made a positive contribution to the recent employment expansion in France, where job growth by other means has been relatively modest, generating around 15% of the total net employment creation since the second quarter of 2013. This is also the case, to a lesser extent, in Spain. In a number of countries – such as Belgium, Estonia, Ireland, the Netherlands and Slovenia – the proportions are higher, in part reflecting wider structural changes in business organisation (moves to outsourcing, freelancing, etc.), as well as changing labour market trends and demographics.¹⁸ At the euro area level, however, offsetting declines in self-employment elsewhere

(particularly in Germany and, to a lesser extent, Italy) have resulted in an overall decline in self-employment over the course of the employment rebound.

5 Concluding remarks

Following a largely domestically driven rebound in euro area GDP, euro area employment has increased by just over 2.2 million. While this is not yet enough to make up for the large losses seen over the course of the protracted economic crisis, the gap with pre-crisis levels has halved and employment growth has been broadly spread, including to many of the countries hardest hit by the crisis.

At the sectoral level, net employment growth has been heavily concentrated in the services sector. This is particularly the case in the trade and transport, business services and non-market services sectors, where expansion in activity is typically more employment-rich than in other sectors. The sectoral dimension of the expansion also helps to explain the relatively lacklustre increase in total hours worked since the depths of the crisis, given typically lower average weekly hours per person in the sectors where employment growth has been strongest since the recovery.

¹⁸ Similar trends have been noted in the United Kingdom, where self-employment growth has been particularly robust in recent years, a development attributed in part to cyclical factors and in part to demographic trends (older workers wishing to remain in the labour market). See, for instance, Sadomir, T., "Self-employment: what can we learn from recent developments?", *Quarterly Bulletin*, Bank of England, 2015 Q1.

In terms of worker and job characteristics, most of the net employment growth has been in higher-skilled, full-time and waged employment (as opposed to self-employment), while a slightly larger proportion of the new employment created has been on temporary rather than permanent contracts. Women and older workers have benefitted to a greater extent than other groups, largely reflecting longer-term trends in employment growth, which were already evident before the crisis.

The greater prevalence of temporary contracts in Spain (and increasingly in France) underlines the strong dualities which characterise these labour markets. Some argue that the widespread use of temporary contracts has a negative impact on workers' welfare and deters investment in human capital, thus limiting the possibilities for higher skill acquisition and longer-term productivity growth. Nevertheless, against a backdrop of elevated unemployment rates (which are still in excess of 20% in Spain), temporary contracts provide access to work and may offer entry routes to more permanent employment at a later stage.

While the increase in euro area headcount employment over the past two years has been considerable, it remains somewhat behind the significant expansion in employment seen in the United States. In part, this is likely to reflect the more flexible US labour market, which was also responsible for the considerably stronger and faster employment adjustment over the crisis period. The lower increase seen in the euro area (and the more protracted adjustment) is likely to reflect the weaker rebound in economic activity compared with pre-crisis levels than in the United States, the higher degree of employment protection and a weaker contribution of productivity developments as a means of containing unit labour cost growth. This has hampered restructuring and the reallocation of labour to faster-growing sectors and firms. As a result, euro area employment levels remain some way below their pre-crisis peak, while the number of US jobs now surpasses pre-crisis levels.