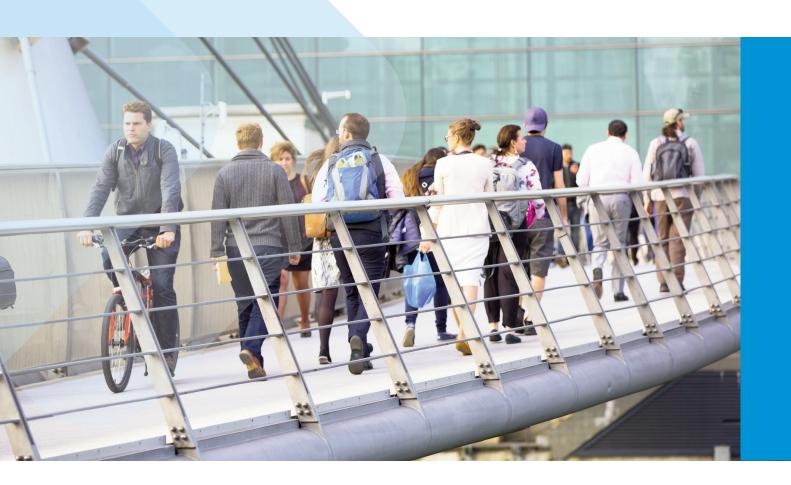


# Employment transitions and occupational mobility in Europe: The impact of the Great Recession



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## Country codes

AT	Austria	FI	Finland	NL	Netherlands
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CZ	Czech Republic	IE	Ireland	SE	Sweden
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## **Executive summary**

### Introduction

The Great Recession has had significant and lasting effects on European labour markets, with a big drop in employment levels, which are yet to recover in many countries almost a decade later. It also affected the employment structure, accelerating structural change and generalising a pattern of job polarisation across Europe, in which employment in mid-paid jobs declined more than in jobs at the top and bottom of the occupational structure.

Although much is known about how the crisis changed the stocks and structures of employment, there is less evidence about the myriad of flows into and out of employment, and from job to job, which are behind these aggregate numbers. Indeed, labour markets are in a constant state of flux, and the same stocks and structures at the aggregate level can be associated with quite different patterns of employment transitions and occupational mobility.

The aim of this report is to investigate the effect of the Great Recession on labour market flows and to explicitly link these individual-level transitions to the broad labour market developments during the crisis, such as the surge in unemployment and the phenomenon of job polarisation. To do this, and building on the 'jobs-based approach' used in Eurofound's European Jobs Monitor, this study introduces a new occupational framework for studying labour market flows; this takes into account the quality of the jobs from and into which the flows are taking place by differentiating them into wage quintiles. This is useful not only in making it easier to link with previous research on structural labour market developments, but also to evaluate the nature and implications of these flows.

The study offers a comprehensive and detailed picture of transitions between labour market states (employment, unemployment and inactivity) and within employment by job quality (wage) quintiles. The analysis is carried out by comparing six European countries (France, Italy, Poland, Spain, Sweden and the UK) that were selected as being representative of different institutional clusters. It is differentiated into three separate time periods: just before the crisis (2006–2007), immediately after (2009–2010), and a few years into the crisis (2012–2013), when some countries started to recover and others continued to experience recession.

## Policy context

In the context of the recent financial and economic crisis, measuring labour market flows and studying their implications for the life chances of workers is as important as measuring developments in aggregate employment stocks and structures. Indeed, a similar level of unemployment can have very different implications depending on whether or not there are significant flows into and out of it, or if the flows are linked to the whole employment structure or only to low-paid jobs. The identification of a trade-off between unemployment and low-paid (or, in general, low-quality) employment would raise important policy issues.

Job polarisation might be expected to be associated with fewer employment opportunities for mid-paid occupations and, therefore, a more-or-less generalised reduction of mobility up and down the occupational ladder. Changes in the patterns of employment mobility and occupational flows directly affect the distribution of life chances among the population. Moreover, if mobility patterns differ significantly across countries, the same external shock can be translated into very different patterns of labour market flows at the individual level.

This report offers a novel perspective for a better understanding of what happened to workers who lost their jobs in the recession – whether they were reallocated to other jobs or whether they moved into unemployment or inactivity – and whether opportunities for upward occupational mobility (or risks of downward mobility) were affected by the crisis.

## **Key findings**

Analysis of the flows between inactivity, unemployment and employment (differentiating five categories of jobs according to their average wages) shows very different patterns in the six selected European countries before, during and after the Great Recession. The results make it possible to identify three different pairs of countries on the basis of the fluidity of their labour markets.

Sweden and the UK are similar in their employment and occupational flows, despite their very different socioeconomic models. Both countries show highly fluid labour markets, with significant flows not only

between employment and unemployment but also between different categories of jobs (implying possibilities for occupational mobility). Levels of mobility remained high during the crisis, although this is probably the result of better general economic conditions (both countries are outside the euro area, and their employment levels have recovered faster than the other countries studied).

Mobility patterns in Poland and Spain suggest a dual labour market, with significant flows between unemployment and low-paid jobs, but few possibilities for mobility up or down the occupational ladder. Compared with Poland, the crisis hit Spain particularly hard, and its effects on unemployment risks were very strong in the middle quintiles.

Finally, France and Italy belong to a third group of countries with comparatively less mobile labour markets and little overall flow between jobs or employment status. The effect of the crisis on the transition patterns in these countries was relatively mild, although it did increase the chances of job loss and made between-quintile flows even less frequent.

#### Conclusion

This study analysed the mobility patterns that are behind structural changes in European labour markets before, during and after the Great Recession, linking individual-level trajectories of employment and occupations to changes in aggregate labour market stocks. Different levels of fluidity in labour market transitions between employment status and occupational levels are associated with similarly broad patterns of structural change, leading to different implications for employment opportunities and ultimately life chances.

Overall, the key findings suggest very different patterns and levels of labour market flows in the six European countries studied. While a certain degree of occupational mobility in labour markets is probably desirable, to the extent it is not limited to the lower occupational levels but allows the possibility of upgrading to better jobs, a proper evaluation of the actual implications of each type of transition for the individuals affected would be needed to draw sound policy implications. This would require expanding the analysis to the actual wage and income levels involved, the scale of unemployment benefits and other attributes of the social system.

## Introduction

The recent financial crisis has had significant and lasting effects on European labour markets. In terms of employment levels, it led to a big drop in employment, which has taken years to recover - in some cases, it has not recovered yet. In terms of employment structures, the crisis generalised a pattern of 'negative job polarisation', in which mid-paid jobs declined in relative (and often also absolute) terms with respect to jobs at the top and bottom of the occupational structure (Eurofound, 2013). These are very significant developments that suggest a real change for the worse in the employment and occupational opportunities of Europeans; declining employment numbers in mid-paid occupations particularly are likely to be perceived by individuals as lessening their chance of finding a good job and of moving up the occupational ladder. Much is known about how the crisis changed the stocks and structures of employment, but not so much is known about how it changed the individual-level flows and transitions between jobs and different employment statuses.

Labour markets are in a constant state of flux, even if aggregate stocks and structures appear relatively stable. Under those relatively stable aggregate numbers, there are a myriad of flows into and out of employment, and from job to job, continuously taking place. The aggregate numbers of labour market statistics are just the net result of those flows in different directions. Of course, that does not make the aggregate numbers less real or important; they reflect the economic and social structures that underlie labour markets, which significantly shape the nature and character of our socioeconomic systems. But the same aggregate stocks and structures can be associated with rather different patterns of employment mobility and occupational flows, and this directly affects the distribution of life chances among the population. The same level of unemployment can have very different implications if there are significant flows into and out of it or not, or if the flows are linked only to low-paid jobs or to the whole employment structure. If there are no flows, the level of unemployment can mean a total exclusion from economic life for a part of the population. If flows are restricted to low-paid jobs, it can be associated with a labour market segmented into two impermeable groups. In the case of frequent flows across the whole occupational structure, it can be harmless to the economic and life chances of the vast majority of the population. Measuring labour market flows and understanding their implications for the chances of workers can be as important as measuring

stocks and structures, particularly in the context of a major crisis like that which occurred in 2008.

The aim of this report is to explicitly link the broad labour market developments of European countries in the last decade with individual-level flows between different employment statuses and occupational levels. In order to evaluate the nature and implications of the flows, and to facilitate the link with previous research on structural labour market developments, workers are classified in occupations and grouped in five categories (quintiles) according to the average occupational wages. This approach is very similar, though not identical to (because of limitations imposed by the data), the 'jobs-based approach' used in the European Jobs Monitor (Eurofound, 2013) and other recent literature on occupational change (see, for instance, Wright and Dwyer, 2003; Fernández-Macías et al, 2012; Oesch, 2013).

The novelty of the approach means that there are few previous comparable studies, and, therefore, the analysis should be open and exploratory. However, it is possible to specify some initial expectations against which the results can be judged. First, since the analysis is carried out by comparing European countries selected as representing different institutional clusters, a significant degree of cross-country variation is to be expected. The extent to which such cross-country variation aligns with the usual institutional country clusters (Ireland and the UK versus Nordic countries versus continental countries versus southern European countries, for instance) should remain an open question. Previous research, for instance, found that the UK and the Nordic countries display similarly high levels of occupational mobility, in contrast to much lower mobility flows in continental and southern Europe (Eurofound, 2006, 2007). Second, although the effect of the Great Recession varied significantly in intensity and duration across countries, the previously mentioned evidence of a generalised shift towards negative job polarisation can be expected to produce similar effects across countries. Negative job polarisation might be expected to be associated with fewer employment opportunities for mid-paid occupations and, therefore, a more-or-less generalised reduction of mobility up and down the occupational ladder. But, again, this initial expectation should be a question to be answered rather than an answer to be confirmed. If countries' mobility patterns do differ significantly, the same external shock can be translated into very different patterns of labour market flows at the individual level. This is what this report tries to elucidate.

The structure of the report is as follows.

Chapter 1 reviews the existing literature on the subject. Although, as noted above, there are no previous studies that used the exact methodology of this report, there are many that cover some specific aspect of employment and occupational mobility in recent years in comparable ways.

Chapter 2 introduces the analytical framework and discusses the methodological challenges of this kind of analysis and how they have been addressed.

Chapter 3 provides some context, summarising the main labour market developments in Europe in recent years.

Chapter 4 is the core of the report, a systematic analysis of the patterns of employment transitions and occupational mobility in six European countries across three different time periods:

- just before the crisis (2006–2007);
- immediately after (2009–2010);
- a few years into the crisis (2012–2013), when some countries started recovering and others continued to experience the negative effects.

Chapter 5 evaluates whether there are significant differences in the patterns of employment transitions and occupational mobility of different sociodemographic groups.

And, finally, Chapter 6 presents a discussion of the link between the broad labour market developments during the crisis (growing unemployment and job polarisation) and individual-level employment and occupational flows.

## 1 Literature review

This study presents an overview of labour market transitions from 2006 to 2013 in six selected European countries: France, Italy, Poland, Spain, Sweden and the UK. Using longitudinal data from the European Union Statistics on Income and Living Conditions (EU-SILC), it offers a comprehensive picture of transitions between labour market states (employment, unemployment and inactivity) and within employment by wage quintiles. Job mobility is extensively investigated in the literature as a key element of workforce flexibility and reallocation of employment. However, to the best of the authors' knowledge, there is very limited evidence on mobility patterns in Europe from, to and within employment by wage levels.

Some papers investigate the subject but focus on particular aspects of it without taking a comprehensive approach. Nolan and Voitchovsky (2016) examined the incidence of job loss by wage levels (quintiles) during the Great Recession in Ireland. Their analysis showed that the probability of remaining in employment is positively correlated with monthly earnings and that this correlation was higher during the 'bust' period (2009) compared with the boom year (2006). However, the study was limited to one specific country and focused exclusively on movements out of employment, and not into or within employment.

A second relevant study is one by Longhi and Taylor (2013), who provided a detailed comparison of mobility patterns for employed and unemployed job-seekers between 2001 and 2010, but in the UK only. They found that the direction of occupational mobility, defined as a transition to an occupation with a higher mean wage than the initial one, was very different across the two groups; while employed job-seekers were more likely to exhibit upward mobility, unemployed job-seekers were more likely to move into low-ranking occupations.

A third paper by Cortes (2016) presented evidence on occupational mobility patterns by ability (and not wage) quintiles in the USA. The results showed that, since the early 1990s, workers with medium ability had a much lower probability of switching out of routine occupations than workers at the top and bottom of the ability distribution. Routine workers of medium ability were also less likely than those at the bottom to get a job in non-routine manual (that is, service) occupations. The study also investigated the transitions to unemployment and inactivity of different occupational groups, revealing that routine workers had become

more likely to enter unemployment than non-routine workers (no significant differences in moves to inactivity were found).

While these studies offer useful insight in the context of the analysis of labour market transitions by job quality levels, they lack a European comparative perspective. This report aims to fill the gap in the literature, not only by offering a cross-country comparison of labour market transitions by wage quintiles, but also by extending the period of analysis to recent years, including the second phase of the recession.

A recent study by the European Commission (2016b) presented an overview of the latest trends in labour market transitions in the European Union using new flow statistics from the European Union Labour Force Survey (EU-LFS) and micro-data from EU-SILC. To track mobility within employment, the analysis focused on transitions towards better jobs from 2008 to 2013 in employment contracts (from temporary to permanent) and working time arrangements (from part-time to fulltime). The current report takes a different perspective and presents evidence on movements towards better or worse pay, a key component of job quality (Muñoz de Bustillo et al, 2011). A similar approach is taken when investigating labour market flows into and out employment. Some evidence on transitions to higher or lower wage deciles in Europe is included in Employment and social developments in Europe: Annual review 2016 (European Commission, 2016a), but this covers a shorter time span in the post-crisis period.

EU-SILC longitudinal data make it possible to cover three distinct sub-periods that are very different in economic performance – one of growth (2006–2007) and two of recession (2009-2010 and 2012-2013) which hit European economies (and within them different sociodemographic groups) in a very heterogeneous way. The literature emphasises the significant impact of macroeconomic factors on mobility patterns, which justifies a separate focus on pre- and post-crisis periods. Apart from the paper by Nolan and Voitchovsky (2016) for Ireland, other studies focus on the period of the economic crisis. Bachmann et al (2015), for instance, investigated the heterogeneous effects of the Great Recession (2008-2010) on labour market transitions in Europe by sociodemographic group and employment type. They concluded that, during the crisis, the transition rate from employment to unemployment increased more significantly for young people, men and middle-skilled workers than for

other groups. Moreover, temporary contracts contributed more than permanent contracts to rising transitions into unemployment, suggesting that the stepping stone function of temporary employment deteriorated during this period.<sup>1</sup>

The European Commission study (2016b) on labour market transitions during the crisis confirmed that transition rates from temporary to permanent jobs fell by 4.6 percentage points at EU level from 2008 to 2013. Finland and the UK were among the few countries that experienced a remarkable increase. Similarly, the rate of movement from part-time to full-time jobs also deteriorated during the crisis (Eurofound, 2016b).

Regarding more general occupational upgrading over the business cycle, Devereux (2002) showed that during periods of economic expansion, workers in the USA tend to move to higher-paying occupations and that pro-cyclical occupational upgrading is stronger for less-skilled individuals. Research for Europe has shown similar results (see, for instance, Teulings, 1993).

Another crucial debate in the literature on labour market transitions revolves around the importance of welfare regimes and country-specific institutional factors, which can either mediate or exacerbate the effect of an economic crisis. Using 2005 Eurobarometer data, a Eurofound-commissioned study on occupational mobility in Europe found that employment regime variations are significant and polarised, especially for early career mobility (Eurofound, 2007). In particular, liberal, liberal-leaning post-socialist and socialdemocratic regimes (such as the UK, Estonia and Sweden, respectively) show the greatest fluidity in their occupational structures, while conservative and Mediterranean country regimes (such as Germany and Italy, respectively) show very high levels of stability.<sup>2</sup> In a conservative-leaning post-socialist system (such as Poland), levels of downward mobility over the life course are the highest.

Other EU-wide analyses on job mobility report similar findings. In a study by Recchi et al (2006), which made use of different data sources for the late 1990s and early 2000s, the results of separate logistic regressions of the likelihood of experiencing upward and downward mobility pointed to the existence of country specificities in regimes of occupational mobility. In particular, the

highest occupational mobility was found in the Netherlands and the UK, and the lowest was found in France. Similarly, a Danish Technological Institute report focusing on a similar time period confirmed that Nordic, Anglo-Saxon and Baltic countries are those with the highest levels of all dimensions of job mobility (that is, change of job, change of occupation and change of employment status), while regimes with stricter employment protection legislation tend to have medium to low levels of job mobility (especially for skilled workers) and lower upward occupational mobility (DTI, 2008). In conclusion, most of the reviewed papers suggested that specific institutional settings explain different patterns of occupational mobility in Europe.<sup>3</sup>

Another important aspect often investigated in the literature is the variation in labour market transition rates across different segments of society. Following a previous US study by Royalty (1998), Theodossiou and Zangelidis (2009) focused on the role of gender and education in explaining labour market dynamics in six European countries in the mid-1990s. Their findings showed that women are less mobile than men across jobs but are more likely to exit to non-employment. While these results hold for both upward and downward occupational mobility in most European countries, Ireland, the UK and Finland are among the exceptions, offering similar chances to men and women to move up the occupational scale (Recchi et al, 2006).

At the same time, education significantly affects women's turnover behaviour. Poorly educated women are more likely to exit to non-employment compared with highly educated women and men. Education also plays a significant role in the context of occupational mobility within employment (Theodossiou and Zangelidis, 2009). Indeed, workers with low to medium educational levels not only have a higher risk of status loss but also lower chances for further career development compared with those who are more highly educated (Recchi et al, 2006; Eurofound, 2007). However, recent evidence indicates that opportunities to move into employment for people with low educational attainment have improved since 2008 in Europe, despite still being much lower than for highly skilled people (European Commission, 2016b).

According to the stepping stone hypothesis, temporarily having an inadequate job early in a career plays a significant role in the chance of moving to a higher-ranked position later on. Being over-qualified enhances future promotion opportunities and career progression. Moreover, accepting lower-quality jobs makes it possible for workers to avoid unemployment and its scarring effects. See Scherer (2004).

<sup>2</sup> Barone et al (2011) confirmed that career mobility in Italy is generally low and that little change has occurred over time. Because of structural features and protections traditionally accorded to self-employment and institutional constraint (such as formal requirements and bureaucratic procedures), opportunities for career advancement are rather limited in Italy. Downward flexibility is also negligible.

The main exception is the study by Theodossiou and Zangelidis (2009), which did not find significant differences in job-to-job and job-to-non-employment mobility behaviour across six European countries (Finland, France, Germany, Greece, Spain and the UK).

Finally, age is another relevant factor in the context of labour market transitions. Not surprisingly, there is a significant relationship between age and employment mobility,<sup>4</sup> with the highest rates for the 25–34 age group (DTI, 2008). But while a substantial part of job

shifts at the same hierarchical level occurs among workers at a relatively young age, the chances of substantial gains in upward occupational mobility are lower for young people than for older workers (Eurofound, 2007).

<sup>4</sup> Employment mobility is broadly defined in this context as the rate of transition from one employment status to another, and therefore covering both movements in and out of the labour market, and between different types of employment contracts.

## 2 Analytical framework and methodology

## The jobs-based approach

The main objective of this report is to study how the recent crisis affected transitions between jobs and employment status in Europe, taking job quality into account. To do this, it takes an occupational perspective, which is inspired by the jobs-based approach that underlies Eurofound's European Jobs Monitor (see Eurofound, 2008, 2016a; also Fernández-Macías, 2012). The key elements of this perspective are summarised below.

The unit of analysis is shifted from individuals to detailed occupations. Occupations can be defined as positions in productive structures involving a particular bundle of tasks and requiring a particular set of skills. Using detailed occupations as the unit of analysis makes it possible to shift the level of analysis to the productive structure (instead of the unstructured 'labour market') and to define job quality in relation to labour market positions, typical task bundles and skills (abstracting from endogenous variability in individual outcomes and attributes).

From this approach, each detailed occupation can be understood almost as a separate labour market. The human capital requirements associated with the job as well as the existence of internal labour market dynamics (such as the benefits of seniority) means that a transition within the same occupation is fundamentally different from a transition outside the occupation. From this perspective, the focus is on transitions that cross occupational boundaries since these imply a real change in socioeconomic position and life chances. Also, from this approach, in order to evaluate the chances afforded by a particular transition (say, from unemployment into a particular occupation), it is necessary to look at the average conditions of people in the same occupation rather than at the specific conditions of the new entrant in a new job.

This approach is similar but not identical to the jobs-based approach of the European Jobs Monitor. In that approach, the basic unit of analysis is the job, defined as the combination of detailed sector and occupation – the Statistical Classification of Economic Activities in the European Community (NACE) and the International Standard Classification of Occupations (ISCO) at the two-digit

level. Because of the limitations of the longitudinal EU-SILC data used for this study, only the occupational definition of a job (ISCO at the twodigit level) is retained. Although previous Eurofound research has pointed out that occupation is more important than sector in the definition of jobs (accounting for most of the explanatory power of the latter in relation to tasks, wages and other attributes; see Eurofound, 2016a, 2017 for more details), using only occupation at the two-digit level reduces the degree of granularity of the analysis and decreases the internal consistency of the units. However, considering the limitations of the data, this level of detail seems like a good compromise, and the approach remains broadly consistent with that of the European Jobs Monitor and other recent approaches to occupation-based structural labour market analysis.

- Occupations are ranked by their average wages and aggregated into quintiles. Again, the study broadly follows the approach taken in the European Jobs Monitor, although the latter also uses other ranking criteria such as job quality (Eurofound, 2013). In most cases, the job-to-job transitions considered significant for the analysis are those that involve not only changing occupation, but also moving into an occupation in a different wage quintile. In other words, occupations that are in the same quintile are considered to provide more or less equivalent conditions and life chances. In some cases, however, the study looks at transitions taking place between specific occupations in order to extend the analysis or illustrate some general finding with an example (see the Annex).
- The analysis then categorises labour market transitions that take place among seven basic positions. Five of these positions correspond to occupations ranked by average wages and are of roughly the same size. These can be interpreted as representing 'low-paid jobs', 'mid-low-paid jobs', 'mid-paid jobs', 'mid-paid jobs' and 'high-paid jobs'. The remaining two correspond to unemployment and inactivity (in other words, the two possible labour market statuses of the working age population not in employment). The basic structure of the analysis is a 7 x 7 grid showing all the possible transitions between the seven positions and between two different points in time, as shown in Table 1.

Table 1: Employment status transition matrix

					Position today	1		
		Low-paid job (Q1)	Mid-low-paid job (Q2)	Mid-paid job (Q3)	Mid-high- paid job (Q4)	High-paid job (Q5)	Unemployed	Inactive
	Low-paid job (Q1)							
ago	Mid-low-paid job (Q2)							
year a	Mid-paid job (Q3)							
н	Mid-high-paid job (Q4)							
Position	High-paid job (Q5)							
Pos	Unemployed							
	Inactive							

Note: Q = Quintile

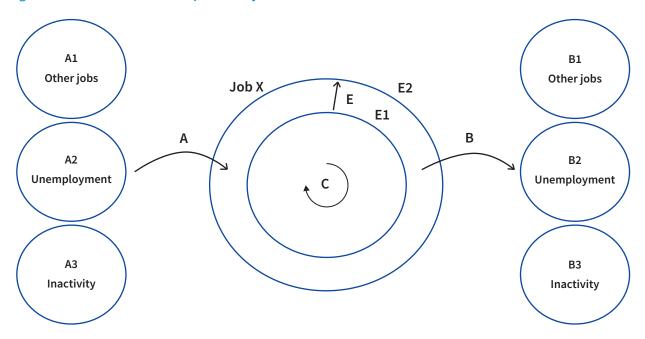
In the analysis, all the working age population are classified according to their current and last year's labour market position in one of the matrix's 49 cells. The cells on the diagonal (shaded) in Table 1 represent stability in labour market position (no change between last year and today). The top left quadrant has 20 cells representing transitions between occupations, while those to the left of the diagonal represent movements down the occupational ladder and those to the right of the diagonal represent movements up. The bottom left quadrant represents transitions from non-employment into jobs of different quality that took place in the last 12 months. The top right quadrant represents transitions from jobs of different quality into non-

employment. Finally, the bottom right quadrant represents stability or shifts between unemployment and inactivity.

## Analytical framework

How can this be related to the transitions approach with the net change figures that would usually be studied in unemployment statistics or the European Jobs Monitor results? Figure 1 shows a full representation of all the possible flows into and out of a particular job (in a closed economy) and how they add up to the figures of employment levels and net change usually analysed.

Figure 1: Flows into and out of a particular job



The circle in the middle of Figure 1 represents a particular job or occupation (Job X) (for instance, nurses or health associate professionals) in a particular country. E2 represents the stock of people employed in that job today, while E1 represents the stock of people employed in the same job one year ago. If E1 is subtracted from E2, the result is E, which represents the net change in employment in that job. In the European Jobs Monitor, these are the main numbers used to evaluate how the occupational structure changes over time. Using the average wage of the job and according to its initial employment (E1), the job is located in a particular quintile. The change in employment (E) is then added to the change of all the other jobs in the same quintile to evaluate how much employment in that particular type of job grew.

From a dynamic perspective, the net change in the number of people employed in a job (E) can be broken down into the number of people who came into the job (A) minus the number of people who left the job (B) over the same period (in other words, E = A - B). The flows of people into the job can be further broken down into three categories:

- people coming from a different job (A1);
- people coming from unemployment (A2);
- people coming from inactivity (A3).

The same breakdown can be done for the flows out of the job (B1, B2 and B3). Finally, C represents flows taking place within the same job/occupation over the last 12 months (for instance, a nurse changing employer but still working as a nurse).

Although the underlying framework is the one represented in Figure 1, in most of the analysis the study groups the jobs into quintiles rather than analysing them individually. However, the set of relations depicted in Figure 1 applies to the analysis at the job quintile level (just replacing 'job' by 'quintile' where necessary). The main difference is that in that case, the flows in and out of the quintile (A1 and B1) can be further differentiated according to the quintile of origin or destination, and this can be used to evaluate whether the change of job implies an upward or downward move in the occupational ladder. The link between this framework and the 7 v 7 mobility matrix presented in Table 1 should be obvious: that is, the flows in and out of a job correspond to the cells outside the diagonal, while those remaining in the job correspond to the diagonal.

#### Data source

To carry out this transition analysis of recent developments in European labour markets, this study used the longitudinal module of the EU-SILC, an annual household survey representative of the working age population that provides separate cross-sectional and longitudinal data. The longitudinal EU-SILC uses a rotating panel structure. Each year, 25% of the sample is substituted after having participated in four consecutive annual waves of the survey. So, in any particular year, four different samples are included in the longitudinal sample of EU-SILC, each one accounting for 25% of the total: one that participates for the first time; one that participates for the second time; one for a third time; and one for a fourth and final time. The variables included in the longitudinal EU-SILC are a sub-sample of the full range of variables available in the crosssectional version.

EU-SILC data make it possible to track changes in employment and labour market status for the same individual over a period of four years. But because of the rotating panel structure, that implies using only a fraction of the sample or pooling data for many different years, which complicates the analysis when the objective is to evaluate the impact of an event such as the 2008 crisis. To estimate the differences in the labour market transition patterns before and after the crisis, it is enough to cover the transitions between two consecutive years, hence making it possible to use a much larger sample of the longitudinal EU-SILC (three-quarters of the total, corresponding to all the sub-samples that have participated at least twice in the panel) without the need to pool many different years of

Taking all this into account, it was decided to construct three different samples:

- for the period before the crisis, a sample including all the respondents in the longitudinal EU-SILC of 2006 and 2007 who had participated at least twice, and including all their information for the base year and the year before this includes three-quarters of the sample participating in 2006, with information on their labour market status for 2005 and 2006, and three-quarters of the sample participating in 2007, with information on their labour market status for 2006 and 2007;
- for the period immediately after the crisis, a sample including all the respondents in the longitudinal EU-SILC of 2009 and 2010 who had participated at least twice, and including all their information for the base year and the year before;

As Bachmann et al (2015) noted, employing annual data can cause an underestimation of the true labour market mobility as this approach does not cover transitions that occur within the period defined by the two consecutive annual measures. However, they reported that this time-aggregation bias is relatively small, at least with respect to cyclicality.

 for the period of the second crisis after a failed recovery, a sample including all the respondents in the longitudinal EU-SILC of 2012 and 2013 who had participated at least twice, and including all their information for the base year and the year before.

In other words, this study used the longitudinal EU-SILC data for all the available years except 2005 (the first year of data), 2008 (the year the cycle changed), 2011 (the year the ISCO classification was updated, generating inconsistent occupational trends and also a year of cycle change) and 2014 (the most recent year and also one of cycle change). With this approach, it should be possible to observe three relatively distinct and consistent periods of labour market flows, while maximising the sample size given the constraints of EU-SILC.

The wage data used to rank the jobs according to their quality were externally linked from the European Jobs Monitor database. This avoided the need to use the wage data from the longitudinal EU-SILC, which have many problems (Engel and Schaffner, 2012), and ensured consistency with the European Jobs Monitor approach. The jobs were then assigned to quintiles for each of the periods on the basis of the total employment of the current year in each of the pooled datasets (so, for 2006 and 2007 in the first period, and so on). Therefore, the allocation of occupations to quintiles was the same within each of the three periods, but different across them. This made it possible to construct the full mobility grid shown earlier in Table 1 for each of the three periods of analysis, with pooled biannual data in each case.

The samples used for the analysis are representative of the working age population in the years covered for six European countries representing different European regions and institutional families (France, Italy, Poland, Spain, Sweden and the UK). All the analysis was carried out separately for each country.

## Presentation and analysis of results

This report uses the following three approaches to present and analyse the results.

o Simple transition tables are used to give a descriptive analysis of the main patterns of employment and occupational transitions for each of the three periods covered. These tables are identical to the grid presented in Table 1, with the cells representing the percentage of people in a particular position one year ago and who are now in

- the same or another position (in other words, the percentages are calculated horizontally, adding up to 100% for each of the positions one year ago).
- Indicators of specific transitions are constructed for an analysis of year-on-year changes. Although the approach is consistent with the other analysis, the procedure for allocating occupations to quintiles is slightly different. Rather than changing it for each of the different periods, the quintile allocation is constructed in the initial year and maintained consistently for the whole period, with just one break forced by the change in the ISCO classification in 2011.
- Focusing on specific transitions, and drawing on the three pooled samples of the transition tables, a series of econometric models (binary and multinomial logistic regressions) is constructed to evaluate the impact of sociodemographic and economic variables on the risks or chances of experiencing different types of transition. The coefficients of these models can be interpreted as the relative risk of, for instance, women or young people moving from a high-paid job into unemployment relative to men or middle-aged people (those aged 30–50) over each of the periods studied. In this way, it was possible to analyse whether the impact of the crisis on labour market flows was concentrated on certain categories of the population or associated with certain types of jobs.

Alongside these three main modes of analysis, other approaches were used to complement them where they were considered useful or illustrative. In some cases, the study looks at the transitions typically observed for some particularly significant occupations to illustrate the more abstract patterns discussed at the level of quintiles (and to discuss some exceptions, too – see the Annex). The EU-LFS (which has a much larger sample and more detailed occupational variables) is also used to contrast results and extend the period of analysis. Although the EU-LFS does not make it possible to observe transitions directly since it lacks a panel structure, in some cases transitions can be reconstructed by using retrospective variables.

Although these are essentially identical to simple contingency tables, they were constructed as multinomial logit models where the dependent variable was the position of the individual in the seven categories of employment and non-employment in the current year, and the independent variables, the position of the individual in the same seven categories one year ago, with a control variable accounting for the effect of the year of observation.

## 3 Shifts in employment and the jobs structure, 1995–2015

The aim of this report is to study employment and occupational transitions in Europe before and after the 2008 financial crisis. First, however, it is useful to provide some context by briefly presenting the main developments in the EU labour market in the last two decades in relation to the same seven broad categories of labour market analysis used for studying transitions in the rest of the report.

These categories, which provide an exhaustive classification of the working age population (15–64 years old), are inactivity and unemployment, and five initially equal-sized categories (quintiles) of employment sorted according to the average wages of the jobs (from low to high). Although the categories are used to study mobility in the rest of the report, this chapter does not look at the flows between them, but

simply at the net change in the number of people who fall into each category over the period.

As in the European Jobs Monitor (Eurofound, 2016b), the years covered are split into three periods: <sup>7</sup>

- 1995 to 2007, corresponding to a long economic and employment expansion in most, though not all, European countries;
- 2008 to 2010, corresponding to the initial shock of the financial crisis;
- 2011 to 2015, when some countries experienced a continuing decline, while others began a timid recovery.

Figures 2, 3 and 4 present graphically the net employment change in the seven categories of the working age population used in the rest of the report.

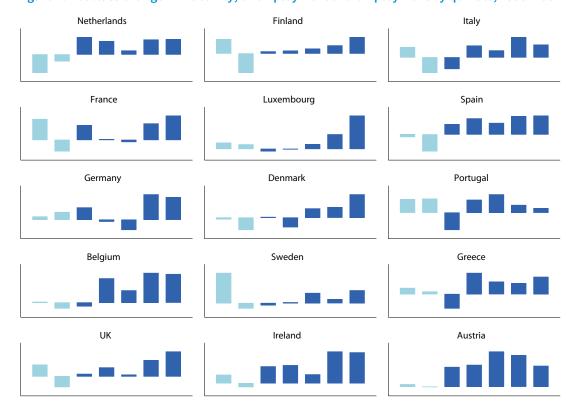


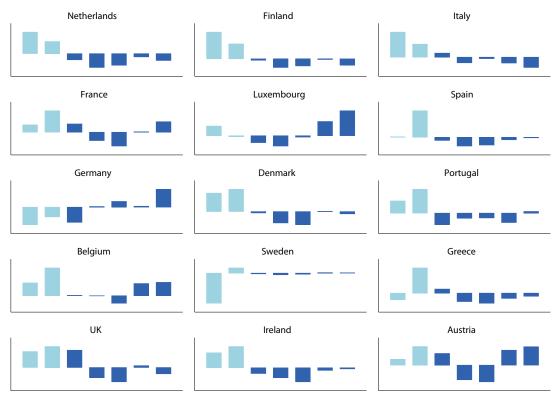
Figure 2: Absolute change in inactivity, unemployment and employment by quintile, 1995-2007

**Notes:** The first light blue bar represents inactivity and the second unemployment. The dark blue bars indicate employment by quintile, from low to high wages.

Source: EU-LFS (authors' calculations) and European Jobs Monitor database (see Eurofound, 2017)

Although this division into periods makes sense in the context of the economic cycle, it is also necessary for purely technical reasons. In 2008 and 2011, the standard classifications of occupation and sector were substantially revised, making the trend inconsistent before and after when using a jobs-based methodology (see Eurofound, 2013 for details). Only data for the EU15 (the EU Member States before the 2004 and subsequent accessions) are presented, for which there is consistent trend information.

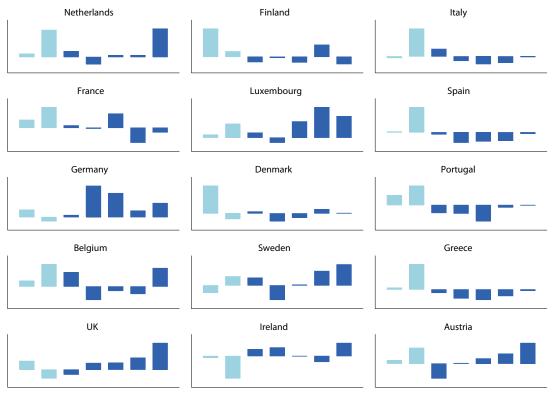
Figure 3: Absolute change in inactivity, unemployment and employment by quintile, 2008–2010



**Notes:** The first light blue bar represents inactivity and the second unemployment. The dark blue bars indicate employment by quintile, from low to high wages.

Source: EU-LFS (authors' calculations) and European Jobs Monitor database (see Eurofound, 2017)

Figure 4: Absolute change in inactivity, unemployment and employment by quintile, 2011–2015



**Notes:** The first light blue bar represents inactivity and the second one unemployment. The dark blue bars indicate employment by quintile, from low to high wages.

Source: EU-LFS (authors' calculations) and European Jobs Monitor database (see Eurofound, 2017)

The broad trends of structural change in employment and non-employment are well-known and have been discussed in previous reports; see, for instance, Eurofound (2013) and Fernández-Macías (2012).

In the initial period (1995–2007), there was a generalised expansion of employment (and decline in unemployment), which was associated with very different patterns of structural change across different European regions.

- In continental Europe, there was job polarisation, with a significant relative expansion of low-paid and high-paid jobs relative to the middle, a trend also found in Ireland and the UK, though less starkly. (Austria is an outlier, being more similar to a southern country in this respect.)
- In northern Europe, there was a strong and clear upgrading, with employment growing faster in higher-paid jobs.
- In southern Europe, there was a centripetal development, with significant relative gains for mid-paid jobs.

In the first period of the crisis (2008–2010), there was a generalised decline in employment and an increase in both unemployment and inactivity. In most cases, this was associated with a pattern of negative polarisation of the employment structure (in most countries, employment losses were concentrated in the middle).

After 2011, the patterns across regions started diverging again.

- In southern Europe, there was a continuation of the negative trends of the recession, with negative job polarisation and unemployment still growing significantly.
- There were employment gains in continental Europe – with continuing job polarisation and, in some cases, still increasing unemployment.
- There was a return to upgrading employment expansion in most of northern Europe as well as in Ireland and the UK.

But, after 2011, job polarisation was much more pervasive than in the expansionary period before 2008, and unemployment continued to grow in many cases (though often more moderately).

Those are the broad patterns of structural change of the European working age population inside and outside the labour market. They describe how each of the magnitudes in the seven-fold classification of the working age population changed over time, without trying to identify links between them. How are developments in inactivity and unemployment linked to the patterns of change in the structure of employment? Is job polarisation associated with more or less growth in unemployment or inactivity? Or with structural upgrading, or the relative expansion of middle quintiles?

The link between inactivity and the structure of employment is the most complicated one. Being inactive literally means being outside the labour market. This can be more or less permanent (arising from disability, for instance), linked to a life course stage (young people are more likely to be in education, older people are more likely to be retired) or to changing economic conditions (some people can move in or out of the labour force depending on their family income or their perceived prospects, depending on labour market conditions). Each of these types of inactivity can be very differently associated with the patterns of structural change in employment. For instance, a person's first entry into the labour market can be associated with relatively lower-paid jobs, but that will strongly depend on the level of education of the entrant (for example, people who enter late because they pursue a Masters of Business Administration are likely to enter directly into high-paid occupations). People leaving employment altogether (retiring) could come from any type of job; but since the focus here is on early retirement (the analysis is restricted to the working age population), it is likely to be more frequent in relatively well-paid jobs that offer better preretirement options. Only for the working age population who move in and out of the labour market depending on general economic conditions might there be some link between developments in inactivity and employment. This most likely affects the bottom quintiles (since a detachment from employment can negatively affect occupational prospects).

The results shown in Figures 2, 3 and 4 illustrate this difficulty of linking the trends in inactivity and developments in different labour market segments. In most cases, the inactive population increased over the 1995–2007 period, especially in Finland, France and Sweden; only in the Netherlands did it decrease significantly over those years. In the first crisis period, the inactive population tended to increase even more generally and significantly, particularly in Finland, Italy and the Netherlands, but there are significant exceptions such as Germany and Sweden. After 2011, inactivity expanded significantly only in Denmark and Finland. But the main point is that this study cannot find any clear link between the change in the number of inactive people and the different patterns of structural change in employment when looking at the net change figures over the three periods.

Unemployment, on the other hand, should be much more directly linked to developments in the employment structure. By definition, unemployment is a temporary separation from employment that should be over as soon as the unemployed person finds a suitable job. Both the risks of losing a job and the chances of finding another job are likely to be unequally distributed throughout the employment structure, as shown by the patterns of structural change displayed in Figures 2, 3 and 4.

Employment losses are concentrated in mid- and low-paid jobs. The highest-paid jobs underwent quite a consistent expansion over the whole period, with very few cases of net job destruction even when the crisis was at its worst. Particularly in the first period of the crisis and, in many cases, in the second period, too, there was a simultaneous net destruction of mid-paid jobs and an increase in unemployment, which suggests that the latter could have been fed mostly from the former. But until the actual transitions are examined, this is not certain. It could be that those displaced from the middle managed to get low-paid jobs, and, therefore, those finding themselves without jobs came from the low rather than the middle quintiles.

As for employment opportunities, the strong expansion of well-paid jobs in the good years and their resilience in the bad years suggests that there would be more opportunities at the top. But, again, until the actual transitions are examined, this is not proven. Although, in the initial period, unemployment declined and good jobs expanded simultaneously in most cases, the link between these trends is far from clear. It could be that the unemployed found low-paid jobs and moved up the occupational ladder later or that the people displaced by them did. It seems plausible that many of the new recruits into the highest-paid occupations would come directly from inactivity because these are roles that are likely to demand a high level of education. Some of the fastest-growing occupations are highly qualified professions such as doctors or teachers.

The last point raises an important policy issue. Is there a trade-off between unemployment and low-paid (or, in general, low-quality) employment? If so, a particular type of relationship might have been expected between developments in unemployment and the lowest wage quintiles shown in Figures 2, 3 and 4. In the 1995–2007 expansion, at least, unemployment should have declined most in those countries where the lowest quintiles grew faster, and vice versa. That was clearly not the case. There are many examples, in different European regions, where significant declines in unemployment were associated with less rather than more employment creation in the lowest quintiles. These include Denmark and Finland in the north and Italy and Spain in the south. In the Netherlands, unemployment declined as the bottom quintile grew, but inactivity declined even further. In Germany, unemployment grew about as much as employment in the bottom quintile (although it could be argued that without that, it would have grown even more). In Belgium and the UK, it was not the lowest but the second-lowest quintile that expanded while unemployment declined. So, at least superficially, the simple narrative of a trade-off between unemployment and the creation of low-paid jobs does not fit the net change findings.

## 4 Impact of the crisis on occupational and employment transitions

In this chapter, the EU-SILC longitudinal data are used to analyse the individual-level yearly transitions between inactivity, unemployment and jobs of different quality in six European countries before and after the Great Recession. The six countries are France, Italy, Poland, Spain, Sweden and the UK.

The main analytical device is the detailed observation of mobility tables representing the percentage of the working age population that, at the start of the period, was in a particular category (say, unemployed) and ended the period in any one of the seven categories (that is, remained unemployed, became inactive, or

found a job in any of the five quintiles). For each country, three tables have been generated:

- one representing the mobility patterns before the crisis (2006–2007);
- another immediately after the crisis (2009–2010);
- a third in the second period of the crisis or beginning of the recovery, depending on country (2012–2013).

The three mobility tables for each country are shown in Tables 2–7. To facilitate the visual inspection and interpretation of the tables, colour gradations have been added to the cells according to the values (red for the highest values and blue for the lowest; the diagonals representing no change in the initial position are shown in green).

Table 2: Mobility tables - France

					2006-20	07						2009-20	)10						2012-20	)13		
				Statu	s curren	t year					Statu	s curren	t year					Statu	s curren	t year		
					(%)							(%)							(%)			
		Q1	Q2	Q3	Q4	Q5	U	ı	Q1	Q2	Q3	Q4	Q5	U		Q1	Q2	Q3	Q4	Q5	U	- 1
	Q1	87.07	3.08	0.91	1.53	0.32	3.79	3.31	87.43	2.51	0.85	1.42	0.16	4.47	3.16	87.93	1.64	0.98	0.78	0.29	4.86	3.51
ago	Q2	1.29	87.95	1.32	2.40	0.67	3.26	3.10	1.20	85.57	1.66	2.19	0.65	5.80	2.93	1.52	84.83	1.76	2.69	0.63	6.01	2.56
year	Q3	0.81	2.75	88.70	1.12	0.21	3.39	3.02	1.29	2.33	86.04	1.50	0.58	5.30	2.97	0.81	1.52	86.53	2.12	1.43	4.54	3.05
1 y	Q4	1.13	1.57	1.28	89.26	1.95	2.21	2.60	0.93	2.29	1.27	88.06	2.14	3.58	1.73	0.46	2.03	1.77	87.90	2.17	3.17	2.49
ţms	Q5	0.19	0.79	0.29	1.85	91.40	2.35	3.12	0.22	0.64	0.40	1.20	91.59	2.39	3.56	0.25	0.46	0.82	1.01	92.96	2.19	2.32
Statu	U	7.65	10.39	4.24	5.84	3.64	59.05	9.18	8.02	11.07	5.06	3.91	2.80	59.93	9.20	9.49	8.33	6.57	4.08	1.17	63.02	7.34
	ı	1.59	2.64	0.69	1.50	1.10	2.06	90.43	1.42	2.11	0.60	1.96	1.55	2.25	90.12	1.92	1.96	1.20	1.11	0.70	2.99	90.12

Notes: Q1 = Quintile 1, Q2 = Quintile 2, etc.; U = unemployment; I = Inactivity

Source: EU-SILC (authors' calculations)

Table 3: Mobility tables - Italy

				2	006-200	7					2	2009–201	0					2	012–201	3		
				Statu	s curren	t year					Statu	s curren	t year					Statu	s curren	year		
					(%)							(%)							(%)			
		Q1	Q2	Q3	Q4	Q5	U	_	Q1	Q2	Q3	Q4	Q5	U	_	Q1	Q2	Q3	Q4	Q5	U	
	Q1	85.51	1.51	0.91	0.80	0.61	4.19	6.46	86.57	0.94	0.80	0.36	0.23	4.92	6.18	84.88	0.46	0.22	0.14	0.20	8.36	5.74
ago	Q2	1.13	88.87	1.29	0.84	0.36	2.91	4.60	0.84	88.39	0.63	0.36	0.47	4.45	4.86	0.42	88.22	0.37	0.29	0.06	6.30	4.34
ear	Q3	0.55	1.15	90.65	1.08	0.70	1.83	4.03	0.40	0.33	91.43	0.81	0.45	2.62	3.97	0.19	0.53	90.77	0.57	0.32	3.95	3.67
1 ye	Q4	0.77	0.72	1.29	90.17	0.73	1.82	4.50	0.40	0.39	1.10	91.10	0.46	2.30	4.26	0.25	0.30	0.38	92.63	0.26	3.30	2.87
sn	Q5	0.38	0.47	0.85	0.70	92.35	1.52	3.73	0.35	0.26	0.59	0.56	92.65	1.65	3.96	0.22	0.13	0.11	0.41	92.34	2.43	4.35
Staf	U	5.74	5.25	3.58	3.35	2.27	55.17	24.64	6.27	5.57	3.61	3.34	3.26	55.70	22.25	7.15	4.33	2.58	2.58	2.25	60.74	20.37
'	1	1.31	1.15	1.05	0.96	1.04	5.63	88.86	1.70	1.34	1.23	1.08	1.50	6.25	86.90	2.36	1.27	1.11	1.15	1.28	7.24	85.59

Notes: Q1 = Quintile 1, Q2 = Quintile 2, etc.; U = unemployment; I = Inactivity

**Source:** EU-SILC (authors' calculations)

Table 4: Mobility tables - Poland

					2006-20	007						2009-20	10						2012-20	)13		
				Statu	s current	t year					Statu	s current	t year					Statu	s curren	t year		
					(%)							(%)							(%)			
		Q1	Q2	Q3	Q4	Q5	U	- 1	Q1	Q2	Q3	Q4	Q5	U	1	Q1	Q2	Q3	Q4	Q5	U	- 1
	Q1	77.43	2.86	2.83	2.83	1.14	7.21	5.71	82.85	1.71	1.39	2.09	0.54	6.18	5.25	85.04	1.27	1.37	0.83	0.83	6.87	3.79
ago	Q2	2.03	83.61	3.58	1.90	0.33	3.35	5.21	1.30	88.78	1.93	1.07	0.29	2.76	3.87	1.39	89.76	1.20	0.59	0.25	3.88	2.93
ear	Q3	1.52	2.81	81.20	5.00	1.98	4.47	3.02	1.48	1.45	85.16	2.71	0.85	5.19	3.17	1.03	0.80	90.62	0.82	0.81	3.51	2.40
1 4	Q4	2.02	1.40	4.92	80.86	4.67	2.95	3.17	1.27	0.94	2.15	88.32	1.68	2.72	2.92	0.99	1.13	1.16	91.12	1.34	2.92	1.34
tus	Q5	0.52	0.42	1.39	4.22	89.45	0.64	3.36	0.44	0.19	0.28	1.75	93.98	1.03	2.34	0.53	0.09	0.27	0.68	95.22	1.63	1.59
Stat	U	9.50	7.76	9.01	3.77	0.90	55.38	13.67	9.73	6.26	9.20	4.00	1.26	48.66	20.88	10.35	6.68	5.09	2.87	1.66	61.44	11.91
	1	2.43	2.72	1.78	1.11	0.92	5.45	85.59	2.48	2.26	1.83	1.14	0.85	3.57	87.88	2.50	1.35	1.26	0.96	1.11	4.43	88.39

**Notes:**  $Q1 = Quintile\ 1$ ,  $Q2 = Quintile\ 2$ , etc.; U = unemployment; I = Inactivity **Source:** EU-SILC (authors' calculations)

Table 5: Mobility tables - Spain

					2006-20	007						2009-20	)10						2012-20	013		
				Statu	s curren	t year					Statu	s curren	t year					Statu	s curren	t year		
					(%)							(%)							(%)			
		Q1	Q2	Q3	Q4	Q5	U	- 1	Q1	Q2	Q3	Q4	Q5	U	- 1	Q1	Q2	Q3	Q4	Q5	U	- 1
	Q1	74.23	5.45	2.13	4.00	0.79	7.01	6.38	72.91	3.06	3.04	2.30	0.41	14.26	4.01	72.24	3.23	5.43	1.12	0.83	12.14	5.02
ago	Q2	5.08	71.41	6.19	6.27	1.40	6.05	3.60	3.28	76.65	3.58	2.31	0.79	9.73	3.66	2.37	74.49	2.68	2.07	0.47	15.15	2.79
ear	Q3	1.85	6.98	75.35	4.82	2.65	5.69	2.66	2.13	2.43	78.04	2.35	1.63	11.71	1.72	1.05	3.89	78.65	2.73	1.50	10.12	2.07
1 ×	Q4	2.77	5.96	3.87	77.15	4.55	3.39	2.31	2.19	1.99	4.78	76.93	4.23	7.99	1.89	0.82	2.94	4.53	79.40	2.44	7.40	2.47
tus	Q5	0.38	0.80	1.74	5.14	87.06	1.99	2.90	0.24	0.68	1.32	2.33	90.34	3.23	1.87	0.69	1.66	1.52	2.41	87.21	4.69	1.82
Staf	U	10.42	11.40	7.60	5.86	3.63	41.20	19.89	9.96	4.00	6.97	3.01	2.92	60.65	12.48	5.39	7.12	4.13	3.01	1.42	66.05	12.89
	1	3.59	2.97	1.22	2.06	2.05	6.00	82.11	2.85	1.60	0.95	1.19	1.81	9.67	81.92	2.83	2.18	0.94	1.22	0.90	13.73	78.20

Notes: Q1 = Quintile 1, Q2 = Quintile 2, etc.; U = unemployment; I = Inactivity

**Source:** EU-SILC (authors' calculations)

Table 6: Mobility tables - Sweden

					2006-20	007						2009-20	)10						2012-20	013		
				Statu	s curren	t year					Statu	s curren	t year					Statu	s curren	t year		
					(%)							(%)							(%)			
		Q1	Q2	Q3	Q4	Q5	U	I	Q1	Q2	Q3	Q4	Q5	U	-	Q1	Q2	Q3	Q4	Q5	U	I
0	Q1	77.08	3.80	4.66	3.53	1.87	3.32	5.75	78.82	4.20	2.63	4.66	1.46	2.62	5.60	78.77	6.03	2.42	3.28	0.66	3.46	5.37
ago	Q2	4.13	73.21	11.65	3.72	1.97	1.62	3.71	4.10	72.10	6.65	6.15	2.66	4.31	4.03	3.68	68.45	11.05	4.42	3.89	3.23	5.27
year	Q3	3.71	7.50	71.91	7.02	5.02	1.21	3.63	3.53	7.93	74.74	5.39	3.91	2.43	2.08	2.11	10.54	70.16	3.85	9.34	2.18	1.81
1 V	Q4	3.05	2.89	5.57	74.62	9.22	1.29	3.36	4.05	6.26	3.03	71.57	10.37	1.73	2.99	1.23	3.93	3.06	80.77	7.13	0.97	2.91
ţms	Q5	1.20	1.02	6.16	10.35	78.41	0.72	2.15	1.02	3.79	2.54	11.44	78.08	1.22	1.90	0.89	4.21	9.62	7.55	75.85	0.56	1.30
Stat	U	17.07	8.26	9.89	4.62	6.09	28.97	25.09	14.37	10.32	3.69	6.01	3.53	43.25	18.82	17.01	12.67	6.23	2.69	1.71	43.57	16.13
	1	8.46	4.42	3.96	4.19	2.81	6.34	69.82	6.66	4.37	2.23	3.17	2.19	8.50	72.88	6.33	5.29	2.70	4.16	1.80	8.57	71.15

**Notes:**  $Q1 = Quintile\ 1$ ,  $Q2 = Quintile\ 2$ , etc.; U = unemployment; I = Inactivity **Source:** EU-SILC (authors' calculations)

Table 7: Mobility tables - UK

					2006-20	007						2009-20	)10						2012-20	)13		
				Statu	s curren	t year					Statu	s curren	t year					Statu	s curren	t year		
					(%)							(%)							(%)			
		Q1	Q2	Q3	Q4	Q5	U	ı	Q1	Q2	Q3	Q4	Q5	U	- 1	Q1	Q2	Q3	Q4	Q5	U	- 1
	Q1	83.80	2.64	1.64	1.25	1.06	1.20	8.42	78.41	4.16	1.67	3.71	1.01	2.31	8.74	77.02	4.35	2.78	2.69	2.65	2.27	8.24
ago	Q2	2.21	84.39	1.93	1.89	2.69	1.90	4.98	4.49	73.53	3.85	5.55	3.64	2.47	6.46	5.04	76.48	6.54	2.68	2.16	2.89	4.21
ear	Q3	2.24	1.98	88.06	1.02	1.87	0.93	3.90	2.34	5.43	77.00	2.76	5.11	3.04	4.31	2.68	6.50	72.18	5.15	6.84	1.55	5.10
1 y	Q4	1.69	1.20	0.64	87.86	3.57	0.54	4.48	3.91	5.29	2.03	76.19	5.91	1.44	5.23	3.70	2.11	5.59	77.38	6.93	0.73	3.56
tus	Q5	0.82	1.95	1.25	2.74	89.41	0.44	3.39	1.94	3.89	4.84	7.55	76.35	1.44	4.00	2.50	2.20	6.37	6.04	77.35	1.41	4.13
Status	U	14.18	11.52	6.57	5.61	3.62	32.15	26.35	13.86	8.40	4.52	2.65	2.11	35.90	32.56	9.56	13.07	5.33	3.68	3.04	42.42	22.89
	1	8.38	3.07	1.21	3.25	1.01	3.06	80.01	6.81	2.96	1.25	2.96	1.17	5.19	79.66	6.81	3.26	2.36	1.71	1.88	5.82	78.16

Notes: Q1 = Quintile 1, Q2 = Quintile 2, etc.; U = unemployment; I = Inactivity

**Source:** EU-SILC (authors' calculations)

## Transitions into and out of inactivity

Transitions into and out of inactivity are represented in the mobility tables in the lowest row and the last column. The lowest row shows transitions from inactivity – how many people who were inactive in the initial year of each transition window had moved into another category one year later. The last column shows transitions into inactivity – how many people initially in any one of the seven possible categories were in the inactive category one year later. The following observations can be made.

Inactivity is a very stable category of the working age population, much more stable than unemployment. In all countries and periods, more than 70% of those who started the period inactive remained so. This stability of the inactive population was not significantly affected by the crisis (again, in stark contrast with unemployment, as is discussed later). This persistence of inactivity is significantly higher in France, Italy and Poland (around 90%), and particularly low in Sweden (around 70%).

Flows into and out of inactivity are slightly skewed towards the bottom of the occupational structure, but again less so than for unemployment. It is interesting to see that flows into and out of inactivity are more skewed towards the lower quintiles in Sweden and the UK, which are otherwise the countries with the most mobility across quintiles, as will be seen later.

Flows into and out of inactivity were also less affected by the crisis. Tables 2–7 show hardly any increase in flows into inactivity (despite the large drops in employment in many cases) and only a small decline in the observed flows from inactivity into employment.

So, for inactivity, these results largely confirm earlier observations based on the discussion of recent net changes in labour markets. Developments in inactivity are less affected by the economic cycle, and the probabilities of moving in and out of inactivity are not strongly determined by occupational differentials.

## Transitions into and out of unemployment

Transitions into and out of unemployment are shown in the column and row labelled 'U' in Tables 2–7 and tell a very different story from the data on inactivity. In this case, both the effect of the cycle and the differentials across quintiles are much more significant. This leads to the following observations.

- The persistence of unemployment is much lower than that of inactivity, although there are very significant differences between countries, ranging from around 30% in Sweden and the UK to around 60% in France and Italy. In most countries, this persistence increased significantly in the second and third periods as a result of the crisis. The increase is particularly striking in Spain, where the share of unemployed who could not find a job in the one-year windows observed rose from 41% to 66% (Table 5).
- Flows into and out of unemployment are strongly skewed towards the bottom of the occupational structure everywhere. The chances of finding a job in the bottom guintiles are at least two or three times higher than the chances of finding a job at the top. The differential chances of losing one's job are even more skewed, although there are significant flows between unemployment and the other quintiles, too, in all the periods. The countries where there is more fluidity between unemployment and low-paid jobs (in both directions) are Poland and Spain. In Sweden and the UK, there are significant flows between unemployment and low-paid jobs but fewer flows in the other direction; instead, in these countries there is more fluidity between jobs (see below). The impact of the crisis on unemployment is mostly through an increase in job losses (flows out of employment) rather than a decrease in the number of workers being hired (flows into employment), although both phenomena can be observed to some extent. So the net increase in unemployment observed after 2008 is more the result of more people being let go than of fewer people finding jobs, according to the analysis. Tables 2-7 also show that transitions from employment into unemployment remained skewed towards lowerpaid jobs, but with a significant increase in the second and third quintiles in some countries (particularly France and Spain), which corresponds to the negative polarisation observed for net change in Chapter 3.
- Another interesting finding is that, although the overall chances of finding a job did not decline very significantly, they did become more skewed by quintile. This is shown more clearly in Figure 5, which shows the differences in transition rates from unemployment into Quintiles 1 and 2 (low-paid), and from unemployment into Quintiles 3, 4 and 5 (mid- and high-paid) between 2006 and 2014. Transitions from unemployment into mid-paid and well-paid jobs declined more significantly in all countries over the period than transitions into lower-paid jobs, with the exceptions of Spain and the UK, where transitions into lower-paid jobs declined significantly.

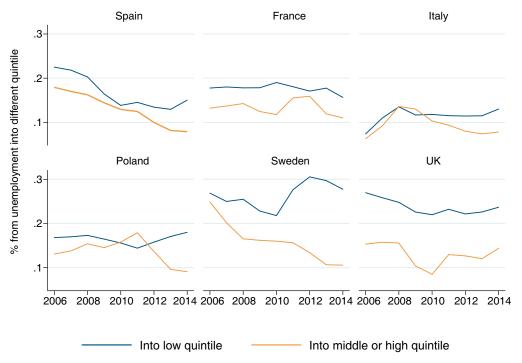


Figure 5: Transition rates from unemployment, by quintile of destination (two-year moving average)

**Source:** EU-SILC (authors' calculations)

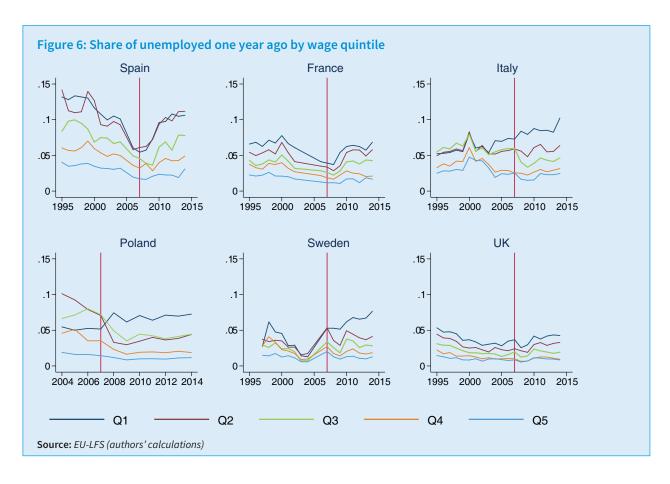
### Box 1: Transitions from unemployment to employment (EU-LFS data)

While EU-SILC data make it possible to measure labour market flows properly (with the exception of those taking place within the same job/occupation), its limited sample size and time coverage represent constraints. The EU-LFS can complement the main findings of the current analysis by extending considerably the period of analysis and by exploiting a much larger sample size. However, EU-LFS data make it possible only to measure pseudo-flows in the labour market by making use of retrospective questions, since the EU-LFS lacks the same panel structure of EU-SILC.

Figure 6 shows the share of unemployed one year ago <sup>8</sup> by quintile for the six countries investigated in this report. With the exception of Poland, for which data are available only since its accession to the EU in 2004, the time period covered is from 1995 to 2015. Since the beginning of the recession in 2007 (indicated by the red vertical line), the share of unemployed increased in the year before the survey in every country with the exception of Poland and the UK. This is particularly marked in Spain and to a lesser extent in France, Italy and Sweden, where it is clear that the increase was driven by the dynamic of the lowest quintile(s). This confirms that, during the crisis, low-paid jobs increasingly offered more employment opportunities for those who were in a situation of non-employment.

Long-term trends reveal heterogeneous patterns. A process of convergence in the share of unemployed people one year before by wage quintile is apparent between 1995 and the beginning of the crisis, particularly in France and Spain (the situation of Poland is more difficult to assess due to a shorter time coverage). In the case of Italy and Sweden, it seems that a break in the series occurred a few years before, in the early 2000s.

The variable WSTAT1Y is used to compute the share of unemployed one year ago (that is, one year before the interview). Because of conceptual differences, WSTAT1Y should be directly compared with the variable MAINSTAT (main labour status) and not with the variable ILOSTAT (ILO work status), which is also used to construct the wage quintiles. However, for the purposes of this study, it was found that the two measures produce similar patterns.



Looking at individual-level transitions, there is a significant amount of fluidity between unemployment and low-paid jobs in most countries and across all periods. But the actual implications of this fluidity for the employment chances of workers can vary significantly across countries because of other observable differences. Only in Sweden and the UK is there a significant degree of mobility between quintiles that suggests the possibility that an entry into a low-paid occupation can lead to a later move up the occupational ladder. This finding is reinforced by the fact that, in these countries, the flows from employment into unemployment are much lower. In Poland and Spain, however, the high degree of fluidity between unemployment and low-paid jobs works both ways, suggesting a dual labour market with very unstable employment trajectories at the bottom of the occupational structure. In France and Italy, the results suggest a similar dynamic, although to a much lesser extent.

## Transitions between quintiles

Transitions between quintiles are shown in the five first rows and columns (labelled Q1–Q5) of Tables 2–7. It is important to bear in mind that the focus is on transitions between jobs that are classified as belonging to the different quintile according to their average wages; in other words, some workers may change jobs within the same quintile and they would not be classified as significant transitions (Box 2 discusses job

stability across quintiles more broadly by looking at the evolution of tenure according to EU-LFS data).

- Persistence in the same quintile for at least a year is generally high (much higher than persistence in unemployment, for instance). But, again, the differences between countries are very significant. They are highest in France and Italy, and lowest in Spain, Sweden and the UK.
- Persistence in the same quintile tends to be slightly higher in the higher quintiles, but this varies a lot. There are big differences in Spain (87% in Q5 versus 74% in Q1) and Poland (89% in Q5 versus 77% in Q1) in 2006–2007, for instance, and very small differences in Sweden, France and the UK. In Sweden and the UK, in fact, in some periods there is more persistence in low-paid jobs than in high-paid ones.
- Looking specifically at the patterns of mobility (that is, cells outside the diagonal), even bigger differences can be seen. Flows between quintiles are very low in France and Italy, even between adjacent ones, while they are very significant in Sweden and the UK, and in Spain before the crisis.
- The crisis did not have a significant effect on the rate of persistence in the same quintile, but it did decrease significantly the transitions between quintiles in Italy, Poland and Spain. In the UK, persistence in the same quintile declined and flows between quintiles grew after 2008, unlike in other countries.

### Box 2: Stability within employment: Job tenure by wage quintile

Employment stability within each quintile can be roughly measured, using EU-SILC, as the percentage of stayers among employed people for two consecutive years. Yet a more important and precise indicator of job stability is average tenure. Due to lack of data on tenure in the main source, the analysis can be complemented with information from EU-LFS.

Figure 7 shows average tenure (in months) by wage quintile for the six selected countries. While Italy is one of the countries in Europe with the highest average job tenure, the UK is one of the lowest. Consistent with the EU-SILC findings illustrated in Tables 2–7, EU-LFS data also show that among the countries where employment stability was the highest during the crisis, this was particularly the case for the top quintiles.

Looking instead at the long-term trends, Sweden appears to be the only case where a clear decline in average tenure can be detected since 1995, at least until the mid-2000s. In Spain, job mobility was essentially stable until the beginning of the crisis, when it decreased significantly. This is also true to some extent for Italy, with the notable exception of the bottom quintile. Average tenure changed the least over time in the UK, and so the EU-LFS data do not confirm the EU-SILC findings of a sharp decline in the percentage of stayers in employment since the beginning of the crisis and the fact that the lowest quintile is the one in which people are most likely to remain.

In the Polish case, the ISCO data present a reclassification problem, apparent in the swapping of Quintiles 1 and 2 between 2007 and 2008. Otherwise, there is evidence of a small increase in tenure that is consistent, although seemingly less intense, compared with the increase in the proportion of stayers identified in the analysis of EU-SILC.

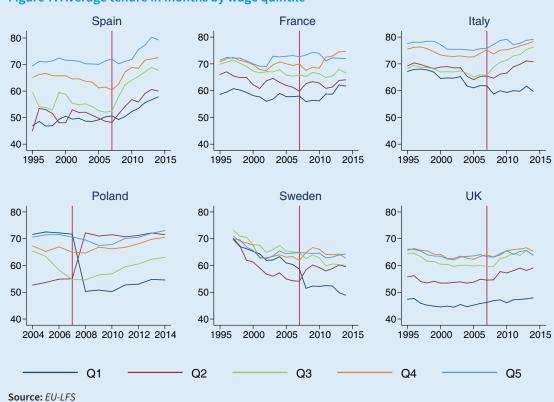


Figure 7: Average tenure in months by wage quintile

#### **Summary**

Overall, the picture provided by this initial look at employment and occupational transitions shows very different patterns in different countries, and also different effects of the crisis. Those differences can be summarised by putting the countries into three groups.

- e High-mobility countries comprising Sweden and the UK. Mobility between quintiles is very high, and although the transition from unemployment into employment is more often into low-paid jobs rather than high-paid jobs, the fact that there are no equivalently high flows from low-paid jobs into unemployment suggests that low-paid jobs do offer chances of later advancement. The effect of the crisis in these two countries was considerably milder than in the other countries, although this is the result of better general economic conditions and partly because of monetary and exchange rate flexibility. Throughout the crisis, however, these countries maintained a highly dynamic labour market. For the UK, flows between quintiles even increased after 2008, in contrast with the rest of Europe.
- o Countries where the mobility patterns suggest a dual labour market: Spain and Poland. In both, job opportunities for the unemployed are particularly skewed towards low-paid jobs, and workers in low-paid jobs are at particularly high risk of unemployment. Together, these two developments suggest a rather unstable lower segment of employment, where frequent transitions in and out of work can be associated with precariousness and limited opportunities for development. In Spain, before the crisis, the flow between quintiles was significant (though lower than in Sweden and the UK) and may have alleviated this dualism to some extent. But the crisis hit particularly hard in Spain, and its effect on unemployment risks expanded into the middle quintiles (with only the top quintile remaining more or less protected).
- Countries with relatively low occupational mobility France and Italy where transitions between quintiles are very low over the whole period, as are transitions in and out of employment. The effect of the crisis on the transition patterns in these countries is relatively mild as well, although it did increase the chances of losing a job and made between-quintile flows even less frequent.

Some of the pairs of countries identified by the mobility analysis may seem peculiar, but they are actually supported by previous research (for instance, Eurofound, 2006 and 2007). Sweden and the UK have rather similar employment and occupational flows, despite their very different socioeconomic models, which are often described as being at opposite extremes of European classifications. This suggests that a high level of mobility can be the result of (or at least, can coexist with) very different socioeconomic models. The fact that Poland and Spain are paired together is less surprising, since both countries carried out similar labour market reforms, generating a similar dualisation by type of contract (Lewandowski, 2014). Both countries have the largest shares of temporary employment in Europe and that surely must be related to the observed outcomes in employment and occupational mobility.

## 5 An econometric approach to labour market outcomes

The analysis of the mobility tables presented in Chapter 4 shows very different patterns of transitions between employment and occupational categories in the selected countries. In particular, the results point to heterogeneous effects of the economic crisis on the chances of moving out of employment or to other job quintiles. These transitions tables are essentially identical to simple contingency tables, except for the fact that they account for the effects of the year of observation. Yet they do not reflect the influence that economic, social and demographic characteristics can have on different labour market outcomes. As previously discussed, a review of the existing literature suggests that there is significant variation in labour market transitions and mobility within employment across different segments of society. For this reason, this chapter presents and discusses the results from multivariable models where the effects of a set of individual and job-related characteristics on mobility patterns are analysed.

More specifically, the probabilities of transitions between the different labour market states and across different employment quintiles are calculated using separate multinomial logistic regressions, with mobility as a dependent variable. To control for observable heterogeneity, a set of explanatory variables (both individual and job-related characteristics) that affect labour market transitions is used. The analysis examines the following key patterns:

- mobility from employment in different wage quintiles (lower, middle or upper) into nonemployment;
- downward mobility within employment (from upper to middle or lower quintiles and from middle to lower quintiles);
- upward mobility within employment (from middle to upper quintiles and from lower to middle or upper quintiles);
- mobility from non-employment into employment (to lower quintiles or to middle or upper quintiles).

Due to sample size limitations, shifts from (and into) inactivity or unemployment are not analysed separately, only movements from (and into) non-employment. Similarly, the five positions in

employment corresponding to the wage quintiles are aggregated to three categories:

- lower, corresponding to Quintiles 1 and 2;
- middle, corresponding to Quintiles 3 and 4;
- upper, which is Quintile 5 only.

Models are run separately for each country (France, Italy, Poland, Spain, Sweden and the UK) and at three different periods (2006–2007, 2009–2010 and 2012–2013). This makes it possible to study the change in the effect of the variables of interest over time, particularly before and after the economic crisis, without assuming that this is the same across all countries. Moreover, in each country and time period, the regressions are run both for the entire population and also separately for women and men in order to investigate gender-specific effects.

Persistence in the same initial status (that is, absence of mobility) is used as a reference category so that the coefficients of the multinomial logistic regression, which are here expressed as marginal effects, can be interpreted as a relative risk of a particular transition. The independent variables included in all the models are:

- gender;
- age in three different categories (young, under 30; middle-aged, 30-49; and older, 50-64);
- health status<sup>9</sup> (and change in health status);
- presence of children aged up to 5 in the household (and any change in the number of children in this age range);
- a time dummy for the initial year of the period.

Moreover, for the analysis of the transitions within employment and from employment to non-employment, the following initial employment conditions are controlled for:

- being in a part-time job;
- having a temporary contract;
- being self-employed.

The use of EU-SILC longitudinal data makes it possible to control for initial circumstances and their change over time without making use of retrospective variables and hence not incurring an imprecision bias (due to the

distance of the event recollected) and an information bias (due to the tendency to reconstruct the past according to present psychological state and needs).

What follows is a presentation and discussion of the evolution of the effect of sociodemographic and job-related characteristics on the probability of losing, getting or changing a job. This is done in a comparative way by showing separately for each country the changes over time in the magnitude of the coefficient of some relevant variables. <sup>10</sup> This chapter focuses on the specific characteristics that are considered particularly relevant in light of the previous literature on transitions within employment and labour market states during the Great Recession. In particular, the emphasis is on the role of the main sociodemographic characteristics (gender, education and age) and job characteristics (having a part-time or temporary contract). <sup>11</sup>

#### Gender

Figure 8 illustrates the effect of being a woman on occupational and labour status mobility, emphasising cross-country differences and isolating the effect of the crisis. It illustrates, for instance, how being a woman increases the risk of losing one's job in the majority of countries studied, especially if working in a low-paid job. The notable exception is Sweden (and, to a lesser extent, France), where the effect during the crisis was exactly the opposite or otherwise not significant. In Spain, the position of women was particularly unfavourable just before the crisis, although this partly reversed in 2011–2012.

Likewise, looking at the other extreme of the spectrum, women were less likely than men to get well-paid jobs (that is, a move from non-employment into the middle or upper wage quintiles), particularly in Poland, Spain and the UK, although this negative effect tended to decrease over time. Sweden, again, is a case apart, where women have a much higher probability of moving into employment (although largely into low-paid jobs) rather than remaining outside it.

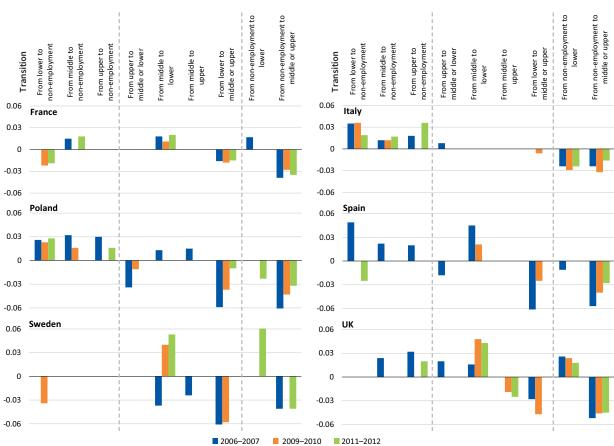


Figure 8: Marginal effects of being a woman on the probability of transition

Note: A missing bar is an indication of a coefficient that is not statistically significant (that is, p ≥ 0.1) and hence is not reported.

Source: EU-SILC

<sup>10</sup> Unweighted estimates are reported.

<sup>11</sup> The full results are available on request from Eurofound

Regarding transitions within employment, the results for France and Italy confirm their lower levels of labour market fluidity regarding both upward and downward mobility. In these two labour markets, being a woman does not particularly increase the chance of changing job compared with men. Women are less likely to move from bottom to middle- or upper-quintile positions in Poland, Spain, Sweden and, to a lesser extent, the UK, indicating that low-paid jobs may be more of a trap rather than a stepping stone. Finally, in the two high-mobility countries, Sweden and the UK, women had higher chances than men of moving downward from middle-quintile jobs to lower ones after the onset of the crisis, while in Spain this was mainly true in 2006–2007.

Overall, the findings are in line with previous studies showing that, in general, women are less mobile than men across jobs and are more likely to exit into non-employment (Theodossiou and Zangelidis, 2009). The notable exceptions are the fluid labour markets in Nordic and English-speaking countries (represented by Sweden and the UK here), where women have a significantly higher risk of downgrading from middlewage to lower wage jobs.

#### **Educational attainment**

Another relevant personal characteristic affecting the risk of losing, getting or simply changing a job is an individual's educational attainment. In particular, the effect of having completed tertiary education compared with secondary or primary education is investigated. Overall, higher education is a shield against employment loss in all countries, although in the aftermath of the crisis, the effect was not as strong as one would have expected (Figure 9).

With the exception of France and Italy, having tertiary education plays a role in determining the chances of upward or downward occupational mobility, notably in Sweden but also in Spain, the UK and Poland. In general, the results suggest that workers with tertiary education have a higher chance of finding a better job and a lower risk of downgrading to a mid- or low-paid one. Yet again, no common patterns before and after the crisis can be detected. Probably the most significant finding is the particularly strong role played by higher education in protecting workers from downward mobility in Sweden in the years immediately after the crisis (2009–2010).

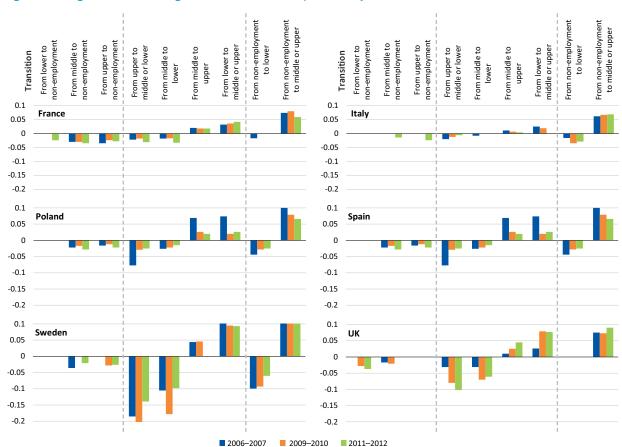


Figure 9: Marginal effects of higher education on the probability of transition

**Note:** A missing bar is an indication of a coefficient that is not statistically significant (that is,  $p \ge 0.1$ ) and hence is not reported. **Source:** EU-SILC

Regarding transitions from non-employment, having a tertiary education clearly helped successful movement into middle- or higher-paid jobs, but at the same time, substantially lowered the chances of getting a low-paid job, especially in Sweden.

So while the findings are generally in line with previous literature, showing that workers with low to medium educational attainment have higher risk of status loss and lower chances of further career development (Recchi et al, 2006; Eurofound, 2007), they also reveal that the protection and advantage offered by tertiary education did not seem to be stronger during the crisis, as might have been expected.

## Age

Apart from gender and education, it is well established that age affects employment mobility and labour market transitions. This study asks how being a younger or an older person influences opportunities and risks related to mobility, compared with a middle-aged individual.

Young people under the age of 30 are the most mobile within employment across all countries in the study (Figure 10). They are more likely to change job compared with both middle-aged and older workers, for whom stability within employment is strongest. This is in line with previous research showing that the highest rate of employment mobility was for the 25–34 age group (see, for instance, DTI, 2008). However, this mobility is not necessarily upward. In Sweden and the UK, young people are actually more likely to shift to lower-paid jobs. Moreover, young people not in employment are in general less likely to get a job, with the exception of the UK, where a higher flow into low-paid jobs is evident.

Not surprisingly, the overall picture is much neater when looking at the labour market transitions of older workers aged 50–64 (Figure 11). Indeed, older people experience much more systematically higher risks of losing their job and moving into non-employment (particularly in France and Poland, and in the pre-crisis period) than middle-aged workers; they also have less chance of moving into employment from non-employment.

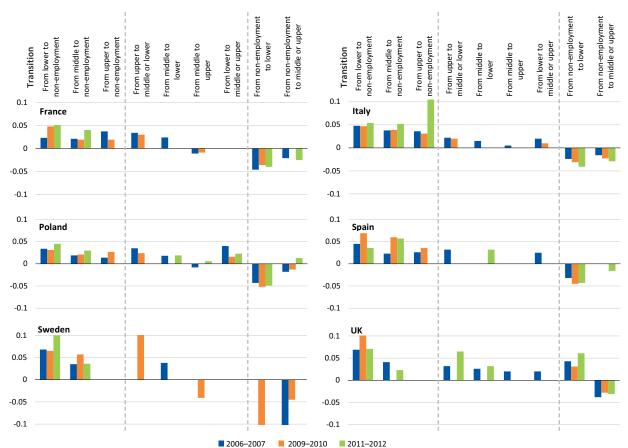


Figure 10: Marginal effects of being young on the probability of transition

**Notes:** 'Young' refers to workers under the age of 30. A missing bar is an indication of a coefficient that is not statistically significant (that is,  $p \ge 0.1$ ) and hence is not reported.

Source: EU-SILC

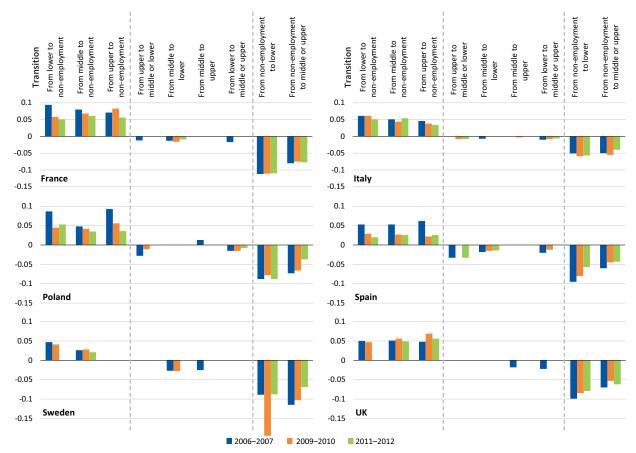


Figure 11: Marginal effects of being older on the probability of transition

**Notes:** 'Older' refers to workers aged 50–64. A missing bar is an indication of a coefficient that is not statistically significant (that is,  $p \ge 0.1$ ) and hence is not reported. **Source:** EU-SILC

### Job-related characteristics

Turning the focus of the analysis to job-related characteristics, the question is what role part-time and temporary work played in determining mobility patterns between jobs and shifts from employment to non-employment before and after the crisis. Because these are characteristics related to the job and not the individual, and therefore the information is available only for people employed in the initial status, the analysis cannot be extended to flows from non-employment to employment.

As Figure 12 clearly suggests, there is a higher risk of job loss associated with part-time work, especially (but not exclusively) for workers in lower- and mid-paid jobs, and particularly in the UK (which together with Sweden is the country with the highest share of part-time employment over the period considered, at 25%) and Spain (with the lowest average percentage of part-time employment among the selected countries, at 7.8%).

Part-time work does not seem to play a relevant role in occupational mobility patterns, as in many cases it is not significant. The few exceptions are found in Sweden and the UK, where there is a part-time penalty associated with upward mobility, and this increased during the

crisis. Regarding the likelihood of downward mobility, in all cases results are not consistent over time, and isolated figures make the interpretation more difficult.

Having a temporary contract also increased the risk of losing employment, and this risk was usually higher for workers in the lower wage quintiles (Figure 13). But for temporary work, cross-country variations are much more pronounced than for part-time work, from the very scattered significant effects in the UK to the much larger (and consistently increasing over time) penalties in Spain. However, countries with very different shares of temporary contracts are being compared: Poland and Spain have more than 20%, on average, over the period considered, while the UK has just 5%. Yet while Italy does not have a particularly high share of temporary contracts either (9.9% on average between 2006 and 2013), these are clearly associated with a higher risk of moving into non-employment, and this was exacerbated by the crisis.

For temporary work, very modest positive effects are found on the marginal probabilities of moving up and down the occupational ladder, even if these are slightly more consistent than for part-time work. However, no particularly meaningful pattern over time can be inferred. The strongest effects are recorded in Sweden, particularly in relation to downward occupational mobility.

From non-employment From non-employment to middle or upper -rom non-employment to middle or upper າon-employment From middle to າon-employment From upper to າon-employment าon-employment From middle to າon-employment From upper to non-employment From lower to middle or upper From lower to to lower From upper to rom middle to From upper to niddle or lower rom middle to From middle to From lower to Transition niddle or lower From middle to From lower to middle or upper Transition lower upper lower upper 0.06 0.06 0.03 0.03 0 -0.03-0.06 -0.06 0.06 0.03 0 0 -0.03 -0.03 Poland -0.06 -0.06 0.06 0.06 0.03 0.03 -0.03 -0.03 Sweden UK -0.06 -0.06 2006-2007 2009-2010 2011-2012

Figure 12: Marginal effects of working part time on the probability of transition

**Note:** A missing bar is an indication of a coefficient that is not statistically significant (that is,  $p \ge 0.1$ ) and hence is not reported.

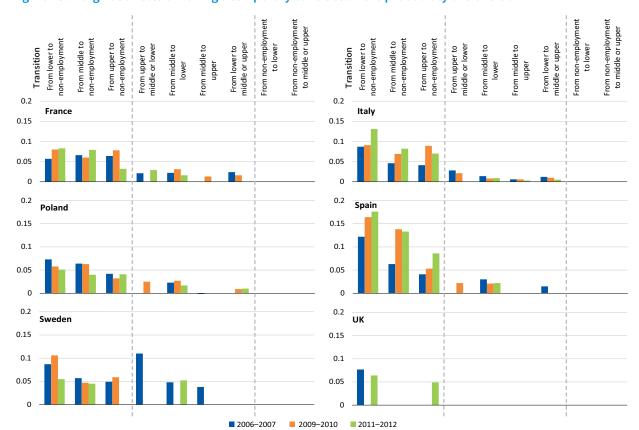


Figure 13: Marginal effects of having a temporary contract on the probability of transition

**Note:** A missing bar is an indication of a coefficient that is not statistically significant (that is,  $p \ge 0.1$ ) and hence is not reported. **Source:** EU-SILC

# **Parenthood**

Gender-specific effects were also investigated by analysing the determinants of occupational mobility and labour market transitions separately for men and women. Only one aspect is discussed here, one known to have a substantially different influence on the labour market participation of women compared with men namely, the presence of small children in the household. 12 In particular, beyond cultural and lifestyle preferences, the lack of affordable childcare services, lack of availability of paid parental (and not only maternity) leave and lack of flexible working time arrangements are among the main reasons why employment is difficult for mothers or even incompatible with motherhood in some countries. This is why maternal employment rates in the EU are still below the recommended target of 60% in many European countries (Dotti Sani and Scherer, 2017).

The negative effect of the arrival of a new child in the household in the previous year on women's

employment can be clearly seen in Figure 14. This effect is particularly strong for women in low-paid jobs, who have a greater risk of losing their job compared, for instance, with those employed in the top wage quintile. However, the effect of having a child varies quite substantially across countries from almost zero in Sweden, a country very supportive of maternal employment, to large penalties in Poland, Spain and the UK. The fact that this disadvantage was on the decrease during the crisis should not necessarily be read as a positive development for social policies and infrastructures. Rather it should be seen as illustrating an increasing necessity for women to work – despite the difficulty of reconciling this with childcare – in order to compensate for decreasing household income.

Contrasting developments can be seen for men, for whom the presence of a new child in the household can translate into greater need for financial resources, making it vital to exit non-employment and find a job (Figure 15). This seems to hold for all countries except for France.

rom non-employment rom non-employment rom non-employmen าon-employment าon-employmen non-employment າon-employment non-employmen rom middle to From upper to From upper to From lower to þ middle or upper to lower 2 middle or lower -rom middle to middle or upper 2 rom middle to rom middle to From lower to **Transition** Transition om middle 0.2 0.2 0.15 0.15 0.1 0.1 0.05 0.05 0 Italy -0.05 -0.05 0.2 0.2 0.15 0.15 0.1 0.1 0.05 0.05 0 Spain -0.05 0.2 0.2 0.15 0.15 0.1 0.1 0.05 0.050 Sweden -0.05 -0.05 2006-2007 2009-2010

Figure 14: Marginal effects on women of having a new child in the household on the probability of transition

**Note:** A missing bar is an indication of a coefficient that is not statistically significant (that is,  $p \ge 0.1$ ) and hence is not reported. **Source:** EU-SILC

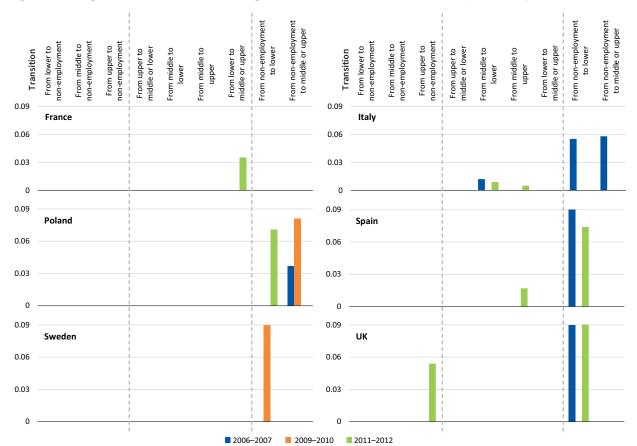


Figure 15: Marginal effects on men of having a new child in the household on the probability of transition

**Note:** A missing bar is an indication of a coefficient that is not statistically significant (that is,  $p \ge 0.1$ ) and hence is not reported. **Source:** EU-SILC

# Summary

The comparison of patterns of employment and occupational mobility in different countries by means of simple transition charts sheds light on the effect that sociodemographic characteristics (gender, education and age) and job characteristics (having a part-time or temporary contract) have on the probability of losing, getting or changing a job. In particular, this chapter looked at whether, for each country investigated, the economic crisis affected the relative importance of these characteristics in explaining mobility patterns across dissimilar socioeconomic models.

Overall, this analysis confirmed some previous findings in the literature, but it also provided new insights on other aspects. These can be summarised as follows.

o In the majority of the countries studied, women face a higher risk of losing employment and lower chances of finding a job, especially in mid-paid and high-paid jobs. Sweden is a notable exception, where women have higher chances of entering employment (although more often through low-paid jobs) and, at the same time, lower or similar risks as men of losing a job. While being a woman does not seem to have a significant effect on job mobility in France and Italy (countries previously identified by this study as having a low degree of occupational mobility overall), in the other countries studied, the effect is clearly negative for upward mobility. However, in fluid labour markets such as those of Sweden and the UK, women have also been more likely than men to move downwards (from top- and mid-paid to lower-paid jobs) since the onset of the crisis.

- Workers with tertiary education have a higher chance of getting good jobs and a lower risk of moving downward to a mid- or lower-paid job (particularly in Sweden), as would be expected. Similarly, highly educated people not in employment are more likely to get a good job rather than a low-paid job. But, surprisingly, while higher education offers protection against non-employment in all countries, this effect is not particularly strong and did not intensify during the crisis, as might have been expected.
- Young people under the age of 30 are the most mobile within employment across all the countries studied, although in many cases this reflects higher chances of shifting to lower-paid jobs (for instance, in Sweden and the UK) compared with middle-aged workers. Moreover, young workers not in employment are, in general, less likely to get a job than those aged 30–50, with the notable exception of the UK, where many have easier access to low-paid occupations. Yet older workers (that is, those aged 50 and over) are also vulnerable in terms of movement both into and out of employment.
- Both part-time and temporary employment are associated with a higher risk of moving out of employment, particularly for workers in lower- and mid-paid occupations. However, these penalties vary quite significantly across countries. While Spain reports some of the highest values for both types of non-standard employment, in the UK the effect is robust over time and consistent for part-time work only. The effect of the crisis is particularly pronounced and clear in Spain, where the risk of losing employment for temporary workers consistently increased over time, which is in line with previous findings on its dual labour market. Finally, neither part-time nor temporary work seems to play a very relevant role in explaining occupational mobility patterns, with the exceptions of Sweden and the UK. In these countries, there is clearly, for instance, an increasing part-time penalty for upward mobility, although in this case further research on the nature of part-time work (voluntary or involuntary) is needed to better interpret the results.
- Having a new child in the household has very different effects depending on gender. For men, it increases the likelihood of getting a job, while for women, it increases the chances of losing employment (particularly if in a low-paid job). The exception is Sweden, where support for maternal employment is among the highest in Europe.

# 6 Linking job polarisation and labour market flows

This report began by referring to the broad patterns of structural change in European labour markets in the past few decades. In particular, it was noted how the Great Recession had led to an acceleration of structural change and a generalisation of job polarisation across Europe, with sharp net declines of employment in midpaid jobs and large increases in unemployment. But it was also noted how little is known of the individual employment flows underlying such broad structural trends, despite their obvious relevance for the actual effect that structural change has on the life chances of workers.

What happened to workers who lost their mid-paid jobs in the recession? Were they reallocated to other jobs, or did they move into unemployment or inactivity? Were opportunities for upward occupational mobility (or risks of downward mobility) affected by the crisis?

To answer those questions, the flows between inactivity, unemployment and employment were analysed in Chapters 4 and 5 (differentiating five categories of jobs on the basis of their average wages) before, during and after the Great Recession. This made it possible to group countries in terms of the fluidity of their labour markets:

- a first group with highly fluid labour markets (Sweden and the UK), with significant flows not only between employment and unemployment but also between the different categories of jobs (implying possibilities for occupational mobility);
- a second group with dual labour markets (Poland and Spain), with significant flows between unemployment and low-paid jobs but few possibilities for mobility up or down the occupational ladder;
- a third group with comparatively less fluid labour markets (France and Italy), with few flows overall between jobs or employment status.

Although the crisis affected all countries, the levels of fluidity remained different, leading to different effects on employment chances.

While it was possible to get an idea of the levels of fluidity of the different European labour markets and how they were affected by the Great Recession, this study has not yet explicitly linked them to the observed patterns of job polarisation or upgrading. Is it possible to make that link?

In theory, it should be, according to the study's analytical framework (see Figure 1 on p. 10). The patterns of job polarisation and upgrading are essentially a characterisation of net employment change across occupations or jobs with different wage levels. According to this model, net employment change in an occupation or job in a certain period can be broken down into flows into the job minus flows out of the job over the same period. So a way to link job polarisation and employment flows would be to simply break down the bars showing net change for a particular quintile into different segments:

- flows into the quintile, differentiating by employment status and quintile of origin; and
- flows out of the quintile, differentiating by employment status and quintile of destination.

Unfortunately, data limitations do not allow such a direct and explicit link to be made between the net change expressed by the quintiles and the flows data presented in this report. To establish a direct link, the longitudinal data would have to cover the same period as the net change presented in the quintile pictures. For instance, considering the process of job polarisation after the crisis, if the analysis is based on comparing the structures of employment in 2007 and 2010, the same individual workers would have to be observed in 2007, 2008, 2009 and 2010. But, as explained in Chapter 2, the EU-SILC data used to analyse labour market flows allow only a two-year window of observation of the same individuals. Longer periods involve a sharp decline in the size of the sample, making it impossible to do the kind of detailed occupational analysis needed (there are also additional problems in using long-term longitudinal data, such as attrition and inconsistency in the classifications).

So a direct link between the patterns of structural change and individual-level employment and occupational flows cannot be established with the data at hand. However, an indirect approach makes it possible to approximate this link and answer some of the underlying questions. The logic of this indirect approach is summarised in Figure 16 (using hypothetical data).

(a) Standard quintile picture representing change between (b) Change in absolute employment initial and final year in absolute employment levels by job between initial and final years in Quintile 5 quintiles, as well as inactivity and unemployment (Q5), broken down by quintile and employment position one year ago Initial population in Q5, final population in Q5, and change in Q5 160 40 140 30 20 120 Number of workers who 10 were in Q5 100 one year 0 earlier ٥, ŵ -10 Number of workers who -20 were in Q5 one year earlier -30 40 Change: equals the change between initial and final year of the number of workers in Q5 who were in 20 Q2 Q5 one year earlier 03 Q2 Q1 Unemployment 0 Inactivity Initial Final population population (c) Quintile picture broken down by one-year flows (shown only for Q5) 40 30 20 10 Unemployment Inactivity à ô O. ģ -10 -20 -30

Figure 16: Linking one-year mobility flows and net change in the employment structure

**Note:** Hypothetical data are used.

Figure 16 can be understood as follows.

- The net change in employment in any period and quintile equals the total population in the quintile in the end of the period minus the total population in the quintile at the beginning. (The same calculation applies to unemployment and inactivity.)
- Since information is available for the (one-year) employment flows for any given year, it is possible to break down the initial and the final populations

of a quintile according to such flows, into seven categories:

- those who were already in that quintile one year earlier (stayers);
- those who were in a different quintile one year earlier (four categories – one for each of the other quintiles);
- those who were unemployed one year earlier;
- those who were inactive one year earlier.

This breakdown of the initial and final populations of the quintile is represented for Quintile 5 in Chart (b).

The initial and final compositions of the quintile can also be compared. For instance, between the initial and the final years of the period, there was an expansion in the category of workers in Quintile 5 who were in Quintile 4 one year earlier. The third bar in Chart (b) shows the difference between the final and initial population values (change) for each of the seven categories of flows. Together, they add up to the total change in employment in Quintile 5. In other words, it is possible to break down the observed change in employment in Quintile 5 into seven categories, corresponding to the change in one-year employment flows over the same period in the composition of the quintile.

As shown in Chart (c), such a breakdown can then be represented within a decomposed quintile picture, which now includes information on change in one-year employment and occupational flows.

It is important to understand that this breakdown cannot be directly interpreted in terms of the employment flows behind net change. For instance, in the example of Figure 16, the coloured segments of the bar representing Quintile 5 show a relative increase in the flows from Quintiles 3 and 4 and therefore an increase in upward occupational mobility associated with expanding well-paid jobs. This interpretation is correct, but it is inferred from comparing the composition of employment in the initial and final periods of the one-year flows rather than the result of a direct observation of the flows of employment over the period covered. The period covered by net change can be much longer than one year, which is the maximum period for which the flows are actually observed. The longer the period of net change, the more difficult it would be to infer long-term flows using this approach.

In practice, to construct this analysis, this study has combined EU-LFS data and the longitudinal EU-SILC data. To compute the absolute population in each country, year, employment status and occupation, the weights for the EU-LFS are used. In other words, the

'Initial population', 'Final population' and 'Change' magnitudes represented in Chart (b), as well as the size of each of the seven bars represented in Chart (a) (the standard quintile picture) are based on EU-LFS data and are therefore entirely consistent with the standard European Jobs Monitor results (Eurofound, 2013). Longitudinal EU-SILC data were then used to break down employment in each country, year and job (as well as unemployment and inactivity) into seven categories according to the position of workers one year earlier (unemployed, inactive or employed in any of the five quintiles). These breakdowns are essentially the same as those used earlier in this report to analyse occupational mobility in Europe in recent years when data from the two sources were combined.

# Results of analysis

The result of this process is a breakdown of net employment change by recent employment and occupation flows, which is shown for the six countries studied in Figure 17. Since the main focus of this report is the impact of the Great Recession, and taking into account the methodological problems previously mentioned, all the analysis in this section focuses on the first period after the crisis, from 2007 (the last good year in most cases) to 2010 (when the first and most generalised impact of the crisis had hit in full force). Thus, the size of the bars in Figure 17 corresponds to the net change in the working age population (in thousands) split into seven categories:

- inactive;
- unemployed;
- employed split into five groups of jobs on the basis of equally sized ranges of average pay, from low to high.

The segments within the bars break down net change into the same seven categories, but refer to the position of the workers one year earlier (in other words, they reflect one-year flows).

Each country is discussed separately below before some general observations are made.

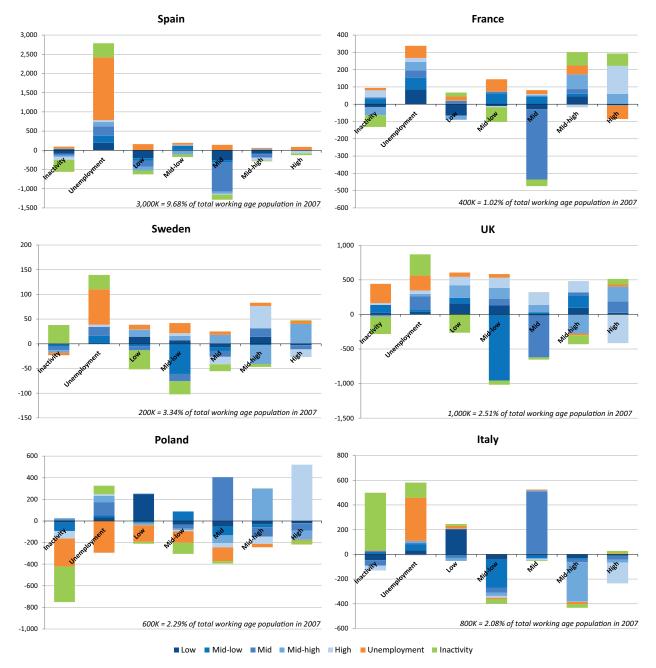


Figure 17: Breakdown of structural change by one-year mobility flows, 2007–2010

Sources: EU-SILC, EU-LFS (authors' calculations) and the European Jobs Monitor database (see Eurofound, 2017).

# **Spain**

Spain is the country that experienced the most dramatic shifts by far in employment between 2007 and 2010. The scale of the change is reflected in the vertical axis in Figure 17, which reaches a maximum value of three million to accommodate an expansion of unemployment of nearly that size in a three-year period. A note on the graph for Spain puts that number in context, expressing it as a percentage of employment in the initial year of the period. In the case of Spain, the expansion of unemployment between 2007 and 2010 represents almost 10% of the total working age population in 2007. Comparatively, the scale of this

change is enormous: the second largest value shown in Figure 17 is around 3%, corresponding to the expansion of unemployment in Sweden in the same period with respect to its initial working age population.

In terms of employment, the main development in Spain during this period is the very significant destruction of jobs in the middle quintile. The implications of such a trend for the patterns of occupational and employment mobility can be gauged from this. For instance, what kind of people lost their jobs in the middle quintile in Spain in the first years of the crisis? In terms of flows, there was mostly a decline in workers who had been in the same quintile (stayers)

for one year or more; in other words, the net destruction of employment reflected mostly losses of relatively stable jobs. However, there was also a net decline in workers coming from inactivity (probably young workers in their first jobs) and of workers who were in the first quintile a year earlier (upwardly mobile workers). So, as might be expected, the process of negative job polarisation during the crisis did result in a decline of employment and occupational opportunities offered by mid-paid jobs. It is important to note that this category of jobs expanded in Spain very significantly in the previous expansionary period (Eurofound, 2013), probably affording significant employment chances that disappeared in the crisis. Only the category of those who were unemployed one year earlier grew, very marginally, in the third quintile.

Where did the workers who had lost their jobs in the third quintile in Spain between 2007 and 2010 end up? Did they have any chance of finding work in other quintiles? Figure 17 clearly shows they did not. If anything, what can be seen is a net decline in flows from the third to the first and second quintiles in this period, with no evidence of employment reallocation even with downward mobility and, of course, a significant increase in flows from the third quintile to unemployment.

Besides the large drop in mid-paid jobs, the most salient result for Spain in Figure 17 is the massive growth in unemployment. Some of this expansion resulted from flows from employment over the last 12 months (mostly from Quintiles 3 and 2). But the fastest-growing category of unemployed in terms of flows is that of workers who were already unemployed 12 months previously. Most of these people must have lost their jobs in the earlier years of the crisis (2008 and 2009), mostly coming from Quintiles 3 and 1, and remain in this category as medium- and long-term unemployed.

### **France**

There was a much less dramatic structural change in France's labour market in this period. Whereas the scale of the chart for Spain reflects changes accounting for nearly 10% of the initial working age population, the scale of the chart for France accounts for only 1%. To facilitate the analysis of country results, the scales of each chart have been maximised, but it is important to bear in mind the enormous differences in the intensity of structural change. Compared with Spain, the structural change of the French labour market between 2007 and 2010 was very small. In fact, it was the smallest of the six countries shown in Figure 17.

However, the nature of change is not dissimilar to that of Spain, particularly in the relative decline of mid-paid occupations. This decline also involved mostly workers who had been more than one year in their jobs, and there is some evidence of flows from mid-paid jobs to Quintile 4 and (mostly) unemployment. However, there is no clear trace of where these mid-paid workers who

lost their jobs in the crisis went, because the expansion of unemployment or flows to other jobs does not match the losses in Quintile 3. There was no large expansion of long-term unemployment, as there was in Spain, so this does not seem to be the result of losses in earlier years. Were those earlier losses later reversed by shifts into employment in other quintiles, or did they result in people leaving the working age population by growing older?

In fact, in the French case, the flows from nonemployment (both inactivity and unemployment) into employment are comparatively high. For instance, there was a significant expansion in Quintiles 2, 3 and 4 of people who had been unemployed one year earlier and an increase in flows from inactivity to the top two job quintiles. At the same time, there were substantial flows from employment into unemployment (from all quintiles except the very top) and into inactivity (particularly from Quintiles 2 and 5, perhaps due to early retirement). But although the flows in and out of employment are relatively high, the flows between jobs in different quintiles (an indicator of occupational mobility) are comparatively low. Thus most of the flows were in and out of employment. If anything, the results suggest that mobility in France occurs via unemployment, with job losses (mostly in mid-paid jobs) leading directly to unemployment but not to longterm unemployment. This implies that, after being for some time unemployed, workers re-enter employment (often changing quintile, according to the results shown in Figure 17).

### **Sweden**

The results for Sweden provide a striking contrast to both France and Spain. The crisis did have a significant impact on unemployment, increasing by almost 150,000, corresponding to more than 2% of the total working age population in 2007 (a more significant increase than in France, although far from the share in Spain). But as already discussed, Sweden has been identified as having a very fluid labour market, and it can now be seen how that characteristic entirely changes the impact of the crisis on employment chances. Relatively small net changes in employment in each quintile conceal large compensating positive and negative flows in and out of employment and between quintiles. As in France, there are significant increases in flows from unemployment (although in this case they even affect the top quintile), but there are also significant increases in flows between quintiles up and down the occupational ladder. For instance, there are significant expansions of flows from Quintile 5 to Quintile 4 (and vice versa), from Quintile 3 to Quintile 4, and so forth. Since there is at the same time a significant decline in the number of stayers in all quintiles, this implies a net increase in occupational mobility over the period. A decline in the proportion of stayers simultaneously with an increase of mobility up

and down the occupational ladder could be interpreted as a process of economic restructuring in a highly fluid economy. However, it could also signal a deterioration of employment stability in a recessionary context, but even this seems more desirable than the freezing of the Spanish labour market over the same period. As Figure 17 shows, Spain had a similar process of decline in long-term jobs (especially in mid-paid jobs) but with no opportunities for reallocation to other quintiles, which translated into a massive expansion of long-term unemployment.

However, not everything is positive in the Swedish case. A significant decline in the number of those previously inactive in the lowest-paid quintiles suggests a deterioration of employment opportunities for younger workers, especially in jobs with low or middle skill levels. And there was also a significant increase in the numbers of those unemployed for more than a year, though this was compensated for by simultaneous flows between unemployment and all types of jobs in the same period.

### UK

The flows and net structural change of the UK labour market are similar to those of Sweden's labour market. If anything, it was even more dynamic in this period. The expansion of unemployment was also about 2% of the initial working age population, and there were also positive and negative flows across the quintiles that would be concealed by looking only at net change, even more significantly than in Sweden. There was also a net decline in stayers in all but the first quintile of employment, with a simultaneous large expansion of positive flows coming from other quintiles.

A peculiarity of the UK case is the extent of downward mobility from the two quintiles holding the best-paid jobs. There are significant flows into all the three lowest-paid quintiles coming from Quintiles 4 and 5, something that does not happen in any of the other countries studied. There is also upward mobility from Quintiles 2 and 3 to the top, but it does not fully compensate for the flows in the other direction (there are significant flows from Quintiles 2 and 3 to unemployment and inactivity, some probably hidden under the growth of stayers in those categories). This is consistent with previous research findings of structural downgrading with job polarisation in the UK over this period (Eurofound, 2013).

### **Poland**

The evolution of the Polish labour market in this period looks quite different from the rest. It is the only case in which unemployment is not the category that grew fastest between 2007 and 2010. In fact, the top three quintiles grew faster in net terms. In other words, the figures for Poland do not look at all like those of a country in recession, but rather of a country

experiencing an expansion of the economy and employment. A decline can be seen in the numbers of those who were unemployed one year previously in all the quintiles (though particularly in the bottom three), with an increase for all quintiles in the proportion of workers who were in the same quintile a year earlier. But despite the obviously good health of the labour market, it shows declining levels of occupational mobility, probably related to a consolidation of a continuous employment expansion across all types of jobs (particularly in the top three quintiles). There are flows but, as in France and contrasting with Sweden and the UK, they are mostly between unemployment and employment, with limited evidence of job-to-job mobility.

# Italy

Discussion of the Italian case is left to the end because the results are difficult to interpret and suggest some problem in the data. Although, overall, the extent of net changes in the Italian labour market is relatively small (second only to France), which can lead to a magnification of relatively inconsequential changes, there are apparently significant but strikingly inconsistent developments in different quintiles (going alternatively up and down). Furthermore, these developments do not seem consistent with the one-year flows also shown in Figure 17. All net changes in Italy, positive or negative, involve only stayers, with hardly any change at all in any of the flow categories (not even in and out of employment). This seems highly implausible, even if the gap between the period of net change covered in the picture and the one-year period used for the breakdown of flows makes it theoretically possible. The figures from the EU-LFS for Italy (which are used for calculating the net flows by employment and quintile categories, determining the size of the bars in Figure 17) suggest a degree of structural change that is inconsistent with the one-year flows estimated using the EU-SILC data (which are used for breaking down the quintiles). The EU-LFS implies significant changes, while the EU-SILC data suggest a very immobile labour market (increasingly so). This inconsistency between the depiction of labour market dynamics of the EU-LFS and EU-SILC is only apparent in Italy. In all the other countries, the link between both sources works reasonably well and produces plausible results, as discussed earlier.

Which is the correct picture of the impact of the crisis on the Italian labour market? It is impossible to say without further analysis, which is beyond the scope of this report. In principle, the EU-LFS is the most tested and reliable source for the study of European labour market trends, although in the Italian case, it has produced some surprising shifts in recent years, and the picture given by the EU-LFS for Italy (the intermittently growing and declining quintiles) seems odd in itself. The very low fluidity of the Italian labour market suggested by

EU-SILC, on the other hand, seems quite consistent with previous findings, although perhaps a bit extreme. So

both sources could be biased in different ways, making their combination particularly problematic.

# **Summary**

What are the overall conclusions of this attempt to link the patterns of structural change in employment and individual-level labour market flows? First, as argued in an earlier chapter, there are wide differences in the levels of mobility in different countries, and this affects the individual transitions behind the broad patterns of structural change very significantly.

Even though the period studied (2007–2010) was associated with a more-or-less generalised pattern of negative job polarisation (with a net decline in mid-paid jobs and a significant increase in unemployment), the levels of fluidity in different countries remained as different as before. Sweden and the UK were much more dynamic than the rest, with more flows up and down the occupational ladder, suggesting better opportunities for a fast reallocation of job losers (although in the UK, increasing flows were also related to occupational downgrading). In contrast, in France and Spain, there seemed to be many fewer reallocation opportunities between jobs, with most flows taking place in and out of employment (implying slower labour market restructuring processes and less economic dynamism).

Italy and Poland were unusual for different reasons. The results for Italy suggest some inconsistency in the data, with the estimation of flows too low for the level of structural change implied by labour force statistics. Poland seemed to barely experience an employment crisis, although even in expansion, its labour market did not become more fluid in the period observed.

# **7** Conclusions

This report has analysed the individual-level employment and occupational flows that are behind the broad patterns of structural change in European labour markets regularly studied by the EU Labour Force Surveys and the European Jobs Monitor. The initial idea behind this analysis was that individual employment chances cannot be inferred directly from the observation of broad changes in labour market stocks, even if the latter obviously constrain the former. Different levels of fluidity in labour market transitions between employment status and occupational levels could be associated with similarly broad patterns of structural change, leading to different implications for employment opportunities and ultimately life chances.

Very different patterns and levels of labour market flows were seen in the six European countries studied. Sweden and the UK, which otherwise have very different socioeconomic systems (for instance, having the lowest and highest levels of wage inequality in EU15, respectively), showed similarly high levels of mobility between employment status and occupational categories, and this remained the case during the crisis, despite both countries experiencing growing unemployment and job polarisation, as did the other countries. This means that the impacts of the crisis on individual-level employment chances were less significant in these two countries and prevented the expansion of long-term unemployment.

The general impact of the crisis on employment in Sweden and the UK was less dramatic than in other cases, partly because of monetary and exchange rate flexibility. Even so, they did experience growing unemployment and negative job polarisation; had their labour markets been less mobile, these developments would probably have been more negative, for some workers at least. It is also important to bear in mind that fundamental differences in the socioeconomic systems of Sweden and the UK mean that similar levels of employment and occupational mobility can have very different implications. For instance, the distance in wage levels between quintiles in the UK are much larger than in Sweden (Eurofound, 2017), which means that the same movement down the occupational ladder entails much more consequential income reduction in the UK - and, in fact, more occupational downgrading was found in the UK than in Sweden.

In contrast with Sweden and the UK, France and Italy showed the lowest levels of mobility between employment status and occupational levels, with the crisis reducing mobility even further. The overall expansion of unemployment and net destruction of mid-paid jobs was smaller in the period 2007–2010 than that seen in Sweden and the UK, but the lack of significant job-to-job flows suggests a more concentrated impact of the crisis on some workers and a slower process of labour market restructuring (since the reallocation of workers across the occupational range involves longer periods of unemployment).

Spain offers the sharpest contrast with the results of Sweden and the UK, in terms of employment opportunities and life chances. The patterns of employment and occupational mobility in Spain suggest a dual labour market, like Poland, with very significant flows into and out of employment affecting the lower occupational levels mostly and very limited opportunities for upward occupational mobility. However, the impact of the crisis in Poland was very mild compared with the impact in Spain, and the differences in employment opportunities and life chances are enormous. In Spain, the vast majority of mid-paid jobs destroyed in the crisis went directly to feed long-term unemployment, with extremely limited opportunities for job reallocation for those affected. The few opportunities for occupational mobility that existed before the crisis disappeared, and only the flows between unemployment and low-paid jobs resisted this trend to some extent.

What are the policy implications of these findings? Should all countries develop more mobile labour markets, like those of Sweden and the UK? A certain degree of occupational mobility in labour markets is probably desirable to the extent that it is not limited to the lower occupational levels but allows upgrading to better jobs.

However, as hinted above, to evaluate a certain degree of labour market mobility as desirable or not would demand evaluation of the actual implications of each type of transition for the individuals affected. This would require expanding the analysis to the actual wage and income levels involved, the scale of unemployment benefits and other attributes of the social system. This report deals only with the different types of employment transitions and occupational mobility that characterise European labour markets and how the crisis impacted on them.

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# Annex

# Employment flows and occupational transitions for four specific occupations

Although this report focuses on the flows across different quintiles, these are originated by specific flows across different occupations. This annex looks at four specific occupations (defined by their two-digit ISCO code):

- building and related trades workers;
- health associate professionals;
- drivers and mobile plant operators;
- clerical support workers.

The flows from and into these specific occupations, from and into all the five quintiles, and from and into unemployment and inactivity are analysed. As these occupations are placed in different quintiles, a specific focus on them allows for a better understanding of some of the trends observed in the aggregate. This also offers the possibility to observe and explain further the heterogeneity among the countries studied in this report.

Three different years are examined: 2006, 2010 and 2013. These represent the pre-recessionary period, and the first and the second phase of the crisis, respectively. Due to the change in the ISCO classification before and after 2011, the focus here is on occupations whose classification remained reasonably consistent before and after the break. It should be emphasised, however, that the comparison between the first two waves and the last is an imperfect one.

# Building and related trades workers

In many European countries (Spain being the main example), the construction sector grew significantly before the crisis and was then the sector most seriously hit by the recession. It was decided to focus on the main occupation in this sector (building and related trades workers) in order to assess to what extent the downturn impacted on employment and occupational flows in and out of this job. In all the countries in the sample,

this occupation belongs either to the second or to the third quintile. Table A1 shows the flows into and out of the occupation in Italy, Spain and the UK.

- As expected, flows from this occupation towards unemployment increased significantly during the crisis. Spain is the most obvious example of this, but Italy (in the second phase of the crisis) also shows a steep increase in the percentage of construction workers becoming unemployed. Consistent with the aggregate trends, the UK shows an increase in flows towards unemployment mostly in the first phase of the crisis.
- In line with the observations made in Chapter 4, there is no clear pattern towards inactivity. While in Italy and, to a lesser extent, in Spain, the number of construction workers becoming inactive diminished during the crisis, in the UK the share increased slightly in the first part of the crisis and then diminished in the second part.
- o For employment opportunities, it appears that even during the recession the construction sector offered some opportunities for jobless workers, as the flows from unemployment to this occupation increased. The absolute number of those who entered the job is much lower than the number of those who exited, but there is evidence, nevertheless, that this job still generated openings for the unemployed in the crisis. Again, this result is consistent with the finding in Chapter 4 that the impact of the crisis on unemployment was mostly due to an increase in laying off workers and not so much due to a decrease in hiring them.
- For possibilities for upward mobility, this occupation does not appear to facilitate climbing the occupational ladder. The only relevant exception appears to be those able to start their own enterprise and become managers, a pattern particularly evident in pre-crisis Spain (in flows into Quintile 4), but which appears to have almost disappeared during the recession.

Table A1: Flows from and into the occupation of building and related trades worker in Italy, Spain and the UK

				•							
					Italy						
Flows out											
	Into Q1	Into Q2	Into Q3	Into Q4	Into Q5	Into U	Into I	Stayers	Total		
2006	13,519.45	4,788.83	4,828.91	9,074.60	4,159.03	58,725.08	80,661.95	959,506.19	1,135,264.04		
%	1.19	0.42	0.43	0.80	0.37	5.17	7.11	84.52	100		
2010	11,235.31	2,971.90	19,495.45	7,351.88	1,631.04	69,183.60	53,784.25	1,422,948.90	1,588,602.33		
%	0.71	0.19	1.23	0.46	0.10	4.35	3.39	89.57	100.00		
2013	2,370.06	8,797.52	713.00	6,333.90	-	112,185.23	20,904.29	865,975.00	1,017,279.00		
%	0.23	0.86	0.07	0.62	0.00	11.03	2.05	85.13	100.00		
					Flowsin						
	From Q1	From Q2	From Q3	From Q4	From Q5	From U	From I	Stayers	Total		
2006	27,703.99	6,980.05	21,303.30	3,489.39	7,463.28	29,491.88	12,442.83	1,293,476.48	1,402,351.20		
%	1.98	0.50	1.52	0.25	0.53	2.10	0.89	92.24	100		
2010	7,625.65	1,614.31	5,687.24	4,901.62	-	58,019.22	41,535.23	1,422,948.90	1,542,332.17		
%	0.49	0.10	0.37	0.32		3.76	2.69	92.26	100.00		
2013	-	6,327.93		3,425.62	-	54,124.60	18,672.69	865,975.00	953,832.80		
%	0.00				0.00	5.67	1.96	90.79	100.00		
					Spain						
					Flows out						
	Into Q1	Into Q2	Into Q3	Into Q4	Into Q5	Into U	Into I	Stayers	Total		
2006	31,962.9	107,228.2	11,806.5	98,699.4	3,625.1	96,070.5	40,872.4	1,044,456.9	1,434,721.8		
%	2.23	7.47	0.82	6.88	0.25	6.70	2.85	72.80	100.00		
2010	20,188.88	38,737.56	28,053.50	26,827.77	15,920.02	205,490.50	20,825.80	684,832.41	1,040,876.42		
%	1.94	3.72	2.70	2.58	1.53	19.74	2.00	65.79	100.00		
2013	5,703.50	10,627.90	8,693.55	2,221.78	6,463.04	165,213.32	11,475.86	452,879.98	663,278.94		
%	0.86	1.60	1.31	0.33	0.97	24.91	1.73	68.28	100.00		
					Flowsin						
	From Q1	From Q2	From Q3	From Q4	From Q5	From U	From I	Stayers	Total		
2006	8,338.0	93,216.5	31,903.1	80,753.8	12,962.4	86,151.7	36,003.8	1,044,456.9	1,393,786.2		
%	0.60	6.69	2.29	5.79	0.93	6.18	2.58	74.94	100		
2010	10,773.02	56,575.97	14,913.08	64,265.29	11,219.21	127,850.21	9,088.02	684,832.41	979,517.20		
%	1.10	5.78	1.52		1.15		0.93		100		
2013	6,763.82	7,475.41	10,937.61			86,441.85	10,590.91				
%	1.16	1.28	1.88	0.00	1.17	14.85	1.82	77.82	100		
					UK						
					Flows out						
	Into Q1	Into Q2	Into Q3	Into Q4	Into Q5	Into U	Into I	Stayers	Total		
2006	3,783.26	12,144.27	12,724.27	-	6,175.57	15,511.96	21,223.73	793,600.04	865,163.10		
%	0.44	1.40	1.47	0.00	0.71	1.79	2.45	91.73	100.00		
2010	6,871.29		44,742.50		27,864.22	59,255.74			1,165,051.27		
%	0.59		3.84	•	•			•			
2013			-	14,435.42		24,737.71					
%	2.06						Ť	•			
	2.00	0.52	0.00	1.77	Flows in	3.04	1.01				
						_	_				

Total

905,294.89

1,223,661.78

820,132.48

100

100

100.00

**Note:** 'Into U' = Into unemployment; 'Into I' = Into inactivity

From Q2

16,347.25

40,383.75

39,496.69

1.81

3.30

4.82

From Q3

7,230.01

86,839.59

12,000.14

0.80

7.10

From Q4

3,864.76

7,361.58

37,044.88

0.43

0.60

4.52

From Q5

14,133.52

47,323.25

12,503.71

1.56

3.87

1.52

From U

16,223.77

31,012.40

17,585.82

1.79

2.53

2.14

From I

39,159.64

42,496.33

19,424.45

4.33

3.47

2.37

**Stayers** 

793,600.04

946,770.15

682,076.79

87.66

77.37

83.17

**Source:** EU-SILC (authors' calculations)

1.63

1.75

0.00

From Q1

**2006** 14,735.90

**2010** 21,474.74

% 2013

# Health associate professionals

This occupational classification includes professions such as nursing and midwifery associate professionals, as well as medical and pharmaceutical technicians. Usually situated in the middle to high quintiles, these jobs require middle to high educational qualifications and tend to have credential barriers (such as the compulsory enrolment in professional organisations). Moreover, they are often in the public rather than the private sector. Table A2 shows the flows into and out of the occupation in Poland, Spain and Sweden.

- pattern emerges during the crisis. In some countries, such as Spain, the number of health associate professionals becoming jobless increased, but to a lesser extent than for workers in other sectors. This might be partially explained by the fact that in many EU countries during the crisis, the public sector did not resort to lay-offs but instead froze recruitment and promotion.
- This last point might also explain some interesting developments for upward mobility flows. Given the specificity of the skills associated with this profession, the natural road for climbing the occupational ladder for these kinds of workers appears to be promotion from health associate professionals to health professionals, usually situated in the top quintiles. However, this kind of mobility reduced significantly during the crisis in Poland and Spain (in the second, and most acute, phase of the recession), while it remained open in Sweden (where the dynamics of the crisis were different, as highlighted in this report).
- There are also some relevant flows towards the bottom quintiles (for instance, in Spain in 2010 or in Sweden). These are linked to personal care and related occupations (such as elderly care), which on average suffered less from the effects of the recession and may have therefore generated openings for displaced nurses in the crisis (Eurofound, 2016a).

Table A2: Flows from and into the occupation of health associate professional in Poland, Spain and Sweden

Table	Table A2: Flows from and into the occupation of health associate professional in Poland, Spain and Sweden										
	Poland										
	Flows out										
		nto Q1					Into U	Into I	Stayers	Total	
	2006	4,271.83	-	1,194.47	8,044.98	8,309.60	2,319.94			90,341.09	
%		4.73							67.28		
	2010	3,589.72	-		, -	496.57		,		,	
%		3.63									
	2013	1,193.76	-	-	-	736.39	6,097.75			•	
%		0.97	0.00	0.00			4.94	1.34	92.16	100.00	
	_					ows in					
					From Q4					Total	
0/	2006	3,433.07	,	629.98	3,691.30	•		•	•	- ,,	
%	2010	4.05					3.78 -				
%	2010	1,213.10 1.26	940.19 0.98	1,761.56				,		95,922.74	
%	2013	-	0.98	1.84 1,103.79		-					
%	2015	0.00		,			•	•	90.13	•	
/0		0.00	0.00	0.67		o.oo Spain	0.03	2.30	50.13	100.00	
						opaiii ows out					
		nto Q1	Into Q2	Into Q3	Into Q4		Into U	Into I	Stayers	Total	
	2006		7,446.45	-		17,667.57					
%		0.00	,	0.00		8.98			85.51		
	2010	5,712.94	39,867.83	1,111.47		38,936.73	16,176.57	3,443.04	122,747.53	227,996.11	
%		2.51	17.49	0.49	0.00	17.08	7.10			100.00	
	2013	-	-	3,018.69	5,669.48	6,608.97	22,983.80	9,390.96	395,439.08	443,110.97	
%		0.00	0.00	0.68	1.28	1.49	5.19	2.12	89.24	100.00	
					FI	ows in					
	ı	From Q1	From Q2	From Q3	From Q4	From Q5	From U	From I	Stayers	Total	
	2006	-	5,697.83	-	3,648.72	11,686.59	12,317.94	12,789.38	168,255.36	214,395.82	
%		0.00	2.66	0.00	1.70	5.45	5.75	5.97	78.48	100.00	
	2010	-	7,559.06	3,746.63	5,564.45	14,565.40	12,606.75	16,018.79	122,747.53	182,808.61	
%		0.00	4.13	2.05	3.04	7.97	6.90	8.76	67.15	100.00	
	2013	3,680.94	1,743.97	-	5,978.70	8,162.16	15,993.64	3,859.44	395,439.08	434,857.94	
%		0.85	0.40	0.00	1.37	1.88	3.68	0.89	90.94	100.00	

## Sweden Flows out

	ı	nto Q1	Into Q2	Into Q3	Into Q4	Into Q5	Into U	Into I	Stayers	Total
	2006	5,900.76	4,009.76	-	2,188.83	8,868.66	-	2,424.65	80,722.79	104,115.46
%		5.67	3.85	0.00	2.10	8.52	0.00	2.33	77.53	100.00
	2010	5,086.30	1,858.37	874.35	6,138.20	8,429.97	3,546.27	3,588.89	122,490.50	152,012.84
%		3.35	1.22	0.58	4.04	5.55	2.33	2.36	80.58	100.00
	2013	2,541.84	-	1,829.27	3,823.29	6,181.23	3,955.59	2,225.64	38,918.07	59,474.92
%		4.27	0.00	3.08	6.43	10.39	6.65	3.74	65.44	100.00

	Flows in										
	F	rom Q1	From Q2	From Q3	From Q4	From Q5	From U	From I	Stayers	Total	
	2006	3,405.05	1,525.78	843.89	1,576.38	16,974.63	1,510.96	7,755.52	80,722.79	114,315.00	
%		2.98	1.33	0.74	1.38	14.85	1.32	6.78	70.61	100.00	
	2010	5,769.12	1,813.77	1,051.75	4,105.77	9,217.07	874.35	6,984.59	122,490.50	152,306.92	
%		3.79	1.19	0.69	2.70	6.05	0.57	4.59	80.42	100.00	
	2013	2,977.69	-	2,161.69	6,551.92	1,579.31	-	752.05	38,918.07	52,940.74	
%		5.62	0.00	4.08	12.38	2.98	0.00	1.42	73.51	100.00	

Note: 'Into U' = Into unemployment; 'Into I' = Into inactivity

**Source:** EU-SILC (authors' calculations)

# Drivers and mobile plant operators

This occupational category includes professions such as:

- locomotive engine drivers and related workers;
- car, van and motorcycle drivers;
- heavy truck and bus drivers;
- mobile plant operators;
- ships' deck crews and related workers.

With very few exceptions, these occupations are usually found in the third quintile. Table A3 shows the flows into and out of the occupation in France, Poland and the UK.

The flows towards unemployment appear to grow consistently in all cases, although at a different pace in different countries. This, again, reflects the heterogeneous effect of the crisis in the countries studied. As observed for building and related trades workers, these outflows are not compensated for by the increased entry of jobless people into this occupation. This seems to confirm once again that the rise in unemployment can be explained more by increases in job losses than decreasing recruitment.

- It seems very hard for workers in this occupation to move up the occupational ladder. Flows into the top quintiles appear to be extremely limited. On the other hand, few workers from the top occupations end up in these kinds of job.
- o It appears instead that there is some degree of mobility from and towards the lowest quintiles, although, again, this varies across countries. While France and Poland display a very low amount of mobility overall (consistent with the mobility regime findings presented in Chapter 4), the UK shows a higher and increasing rate of mobility in the middle to bottom quintiles. A closer inspection of the data (not shown in the table) reveals that some of the occupations with more interchange within this specific job are elementary occupations such as refuse workers and transport and storage labourers.

Tal	ole A3	: Flows fro	m and into	the occup	ation of dr	ivers and r	nobile ope	rators in F	rance, Polan	d and the U		
					F	rance						
	Flows out											
	-	Into Q1	Into Q2	Into Q3	Into Q4	Into Q5	Into U	Into I	Stayers	Total		
	2006	2,618.70	17,357.97	14,472.71	2,250.05	-	16,885.36	39,008.44	746,083.67	838,676.91		
%		0.31	2.07	1.73	0.27	0.00	2.01	4.65	88.96	100.00		
	2010	1,609.70	12,617.42	12,976.20	2,870.50	4,464.67	69,301.50	13,850.04	719,947.80	837,637.84		
%		0.19	1.51	1.55	0.34	0.53	8.27	1.65	85.95	100.00		
	2013	7,073.85	4,333.30	5,862.16	7,343.49	-	52,400.67	11,399.84	742,220.42	830,633.74		
%		0.85	0.52	0.71	0.88	0.00	6.31	1.37	89.36	100.00		
	Flows in From Q1 From Q2 From Q3 From Q4 From Q5 From U From I Stayers Total											
		From Q1	From Q2	From Q3	From Q4	From Q5	From U	From I	Stayers	Total		
	2006	13,190.24	16,837.70	12,759.81	2,020.21	4,877.37	18,147.61	9,285.48	746,083.67	823,202.10		
%		1.60	2.05	1.55	0.25	0.59	2.20	1.13	90.63	100.00		
	2010	7,018.97	18,306.92	-	4,342.05	-	23,002.29	17,937.75	719,947.80	790,555.80		
%		0.89	2.32	0.00	0.55	0.00	2.91	2.27	91.07	100.00		
	2013	15,693.53	18,222.23	-	13,792.16	5,560.61	42,198.47	14,719.64	742,220.42	852,407.06		
%		1.84	2.14	0.00	1.62	0.65	4.95	1.73	87.07	100.00		
					F	Poland						
	Flows out											
		Into Q1	Into Q2	Into Q3	Into Q4	Into Q5	Into U	Into I	Stayers	Total		
	2006	11,775.02	8,910.97	33,392.06	17,686.72	3,736.14	32,519.88	18,729.62	518,396.30	645,146.71		
%		1.83	1.38	5.18	2.74	0.58	5.04	2.90	80.35	100.00		
	2010	5,003.79	14,229.67	17,306.26	1,204.01	-	34,833.63	18,976.30	764,770.37	856,324.03		
%		0.58	1.66	2.02	0.14	0.00	4.07	2.22	89.31	100.00		
	2013	541.49	1,910.01	4,612.04	4,045.78	-	30,914.12	11,835.89	760,678.33	814,537.66		
%		0.07	0.23	0.57	0.50	0.00	3.80	1.45	93.39	100.00		
					F	lows in						
		From Q1	From Q2	From Q3	From Q4	From Q5	From U	From I	Stayers	Total		
	2006	15,644.81	17,874.86	23,850.58	11,977.01	-	47,042.76	23,762.94	518,396.30	658,549.26		
%		2.38	2.71	3.62	1.82	0.00	7.14	3.61	78.72	100.00		
	2010	3,199.02	15,526.78	18,144.74	994.52	-	33,982.91	14,338.06	764,770.37	850,956.42		
%		0.38	1.82	2.13	0.12	0.00	3.99	1.68	89.87	100.00		
	2013	11,057.70	9,928.95	6,783.55	587.71	-	19,259.08	19,097.75	760,678.33	827,393.07		
%		1.34	1.20	0.82	0.07	0.00	2.33	2.31	91.94	100.00		
						UK						
					FI	ows out						
		Into Q1	Into Q2	Into Q3	Into Q4	Into Q5	Into U	Into I	Stayers	Total		
	2006	21,905.45	29,330.69	10,704.42	3,789.06	7,733.30	-	44,943.00	747,325.60	865,731.54		
%		2.53	3.39	1.24	0.44	0.89	0.00	5.19	86.32	100.00		
	2010	36,665.66	22,231.19	27,032.33			56,216.45			763,173.77		
%		4.80	2.91	3.54	0.00	0.70	7.37	3.39	77.29	100.00		
	2013	10,711.04	63,639.88	10,942.25	7,395.39	6,571.50	32,826.03	18,099.52	766,565.34	916,750.95		
%		1.17	6.94	1.19	0.81	0.72	3.58	1.97	83.62	100.00		
	Flows in											
		From Q1	From Q2	From Q3			From U	From I	Stayers	Total		
				13,266.63					747,325.60			
%		•	•	•					91.49			
				13,513.20		7,608.99						
									02 21			

**Note:** 'Into U' = Into unemployment; 'Into I' = Into inactivity **Source:** EU-SILC (authors' calculations)

45,219.14

5.65

5.05

25,405.22

1.91

2.84

4,423.87

0.57

0.49

5,163.11

1.07

0.58

31,894.49

0.58

3.56

2.08

1.19

10,679.24

766,565.34

83.21

85.60

895,488.67

100.00

100.00

6,138.27

4.93

0.69

%

2013

# Clerical support workers

This broad and heterogeneous occupational classification typically includes mid-paid jobs such as secretaries and keyboard operators. Among the four occupations selected, it is most affected by the break in ISCO classification, and hence the results should be interpreted with particular caution. Table A4 shows the flows into and out of the occupation in France, Italy and Spain.

- Employment also contracted in this occupation, as is evident from the increase in flows towards unemployment. Once again, the picture for inactivity is blurred. While flows towards inactivity diminished in Spain, they rose significantly in France and, to a lesser extent, in Italy.
- o Mobility patterns into and from this occupation appear to be more differentiated than for other occupations analysed thus far, with more downward mobility but also upward mobility towards the top quintile. Indeed, a deeper analysis of the data (not shown in the table) shows that clerks often have the opportunity to upgrade their position by becoming employed as business and administration associate professionals or information and communication technicians. These flows explain most of the mobility towards the top quintiles observed in France and Spain.
- Interestingly, while on aggregate both France and Italy seem to have similar mobility regimes, the data for this specific occupation in France show, on average, more mobility than in Italy.

Table A4: Flows from and to the occupation of clerical support worker in France, Italy and Spain

iabt	Table A4. Hows from and to the occupation of clerical support worker in Trance, italy and Spain											
					F	rance						
						ows out						
									Stayers			
	2006	26,092.81	•	•	•	•	•	•	1,903,388.96			
%		1.18			3.92				86.43			
	2010	18,248.97	•	3,081.14	•	•			2,064,864.37			
%		0.75			4.70				84.32			
	2013	4,569.15	•	6,894.52	•		28,007.90					
%		0.81	2.49	1.21	8.20		4.94	6.80	75.56	100.00		
Flows in From Q1 From Q2 From Q3 From Q4 From Q5 From U From I Stayers Total												
0/	2006	34,573.53	•	23,257.19	•	24,781.76	•	•	1,903,388.96 87.80			
%	2010	1.59	43,476.60			22,436.86	3.12	3.12 65,101.83				
%	2010	26,762.93 1.11	,	6,221.91 0.26	•	0.93	•	,	2,064,864.37 85.47			
70	2013	3,212.10		3,197.16					428,823.04			
%	2013	0.63	•	•	3.14				84.21			
70		0.03	2.73	0.03		Italy	4.01	4.03	04.21	100.00		
						ows out						
		Into Q1	Into Q2	Into Q3			Into U	Into I	Stavers	Total		
		5,011.79							1,955,615.48			
%		0.24	0.62	0.42	1.38	0.47	1.83	3.29	91.76			
	2010	9,214.61	6,945.06	11,836.13	21,601.51	9,745.73	33,916.91	60,019.03	1,880,570.69	2,033,849.66		
%		0.45	0.34	0.58	1.06	0.48	1.67	2.95	92.46	100.00		
	2013	981.10	3,898.47		8,900.36				1,280,136.69			
%		0.07	0.28	0.50	0.63	0.07	3.74	3.77	90.95	100.00		
					F	lows in						
		From Q1	From Q2	From Q3	From Q4	From Q5	From U	From I	Stayers	Total		
	2006	23,744.98	22,683.97	19,667.76	35,933.17	17,506.74	25,751.42	34,876.16	1,955,615.48	2,135,779.68		
%		1.11	1.06	0.92	1.68	0.82	1.21	1.63	91.56	100.00		
	2010	25,229.20	10,486.23	19,527.49	40,345.87	13,285.49	41,417.47	65,594.03	1,880,570.69	2,096,456.46		
%		1.20										
	2013	2,727.00	-		4,126.80	615.78	•	•	1,280,136.69			
%		0.20	0.00	0.67	0.30	0.04	2.83	3.36	92.60	100.00		

# Spain Flows out

		Into Q1	Into Q2	Into Q3	Into Q4	Into Q5	Into U	Into I	Stayers	Total
	2006	15,711.84	114,788.46	5,235.19	11,661.81	4,640.02	41,345.62	31,239.25	949,904.16	1,174,526.35
%		1.34	9.77	0.45	0.99	0.40	3.52	2.66	80.88	100.00
	2010	17,458.64	68,973.84	12,682.38	50,485.81	43,544.77	128,351.91	17,917.57	1,067,391.57	1,406,806.49
%		1.24	4.90	0.90	3.59	3.10	9.12	1.27	75.87	100.00
	2013	7,306.82	24,811.41	-	19,511.08	-	57,040.81	5,952.15	456,919.59	571,541.86
%		1.28	4.34	0.00	3.41	0.00	9.98	1.04	79.95	100.00
					F	lows in				
		From Q1	From Q2	From Q3	From Q4	From Q5	From U	From I	Stayers	Total
	2006	18,075.74	114,667.65	22,669.61	37,663.28	21,156.84	33,742.44	62,070.87	949,904.16	1,259,950.60
%		1.43	9.10	1.80	2.99	1.68	2.68	4.93	75.39	100.00
	2010	13,847.54	123,422.08	8,958.76	87,647.15	37,621.30	46,084.89	39,647.91	1,067,391.57	1,424,621.19
%		0.97	8.66	0.63	6.15	2.64	3.23	2.78	74.92	100.00
	2013	257.21	18,428.43	-	17,523.99	3,293.56	43,432.34	10,187.57	456,919.59	550,042.69

3.19

0.60

7.90

1.85

83.07

100.00

**Note:** 'Into U' = Into unemployment; 'Into I' = Into inactivity **Source:** EU-SILC (authors' calculations)

3.35

0.00

0.05

This study investigates employment and occupational mobility in Europe before and after the 2008 financial crisis, with the aim of linking individual-level employment transitions to the broad labour market developments during the crisis, such as the surge in unemployment and the phenomenon of job polarisation. The analysis compares six European countries that represent different institutional clusters - France, Italy, Poland, Spain, Sweden and the UK. It tracks the transitions of their working age populations into and out of inactivity, unemployment and employment (in five wage categories). The study seeks to better understand what happened to workers who lost their jobs during the recession, beyond the headline unemployment statistics. Did they find other work and, if so, was it better or worse paid? Were opportunities for upward occupational mobility affected by the crisis? The findings show that the countries studied fall into three distinct categories based on the degree of occupational mobility characterising their economies.

The European Foundation for the Improvement of Living and Working Conditions (Eurofound) is a tripartite European Union Agency, whose role is to provide knowledge in the area of social, employment and work-related policies. Eurofound was established in 1975 by Council Regulation (EEC) No. 1365/75, to contribute to the planning and design of better living and working conditions in Europe.



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