SkiLMeeT

Occupational mobility, wages and worker well-being

Authors: Bachmann, Ronald; Hauret, Laetitia; Martin, Ludivine & Nguyen-Thi, Thuc Uyen

Reviewer: Ulrich Zierahn-Weilage

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Table of contents

Abstract

This paper provides evidence on occupational mobility in Europe, as well as the consequences of these transitions for workers, which play an important role for the structural change of labour markets. We analyse the extent of occupational mobility related to job-to-job transitions, the importance of voluntary vs. involuntary occupational mobility, and wage mobility related to occupational mobility. For our analysis, we use EU-SILC data and separately analyse the period 2011-2014 and 2015-2018. We also discuss the role of working conditions in the context of occupational mobility and labour and skills shortages.

Our results show first that occupational mobility in Europe is sizeable, and that it varies strongly between countries. Second, occupational mobility differs strongly between socio-economic groups, with women, low-skilled workers and older workers being much less occupationally mobile than men, medium-skilled and younger workers, respectively. Third, these differences in occupational mobility between socio-economic groups are mirrored by differences in wage mobility between these groups. Fourth, we observe large differences between the two periods analysed. The first period, strongly affected by the Great Recession, features more inequalities between countries and between socio-economic groups than the second period that was marked by sustained economic growth. More turbulent times therefore seem to exacerbate inequalities related to occupational and wage mobility. Consequently, our results have important social and policy implications.

Acknowledgements

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1. Introduction

European labour markets are currently facing several challenges. The digital and the green transition in particular are leading to structural changes. Both transitions are increasing labour demand for certain occupations and reducing it for others. For the technology-induced digital transition, Dauth et al. (2021) show that employment losses in the manufacturing sector in Germany due to robot adoption were fully offset by additional jobs in the service sector. Bachmann et al. (2024a) find that in Europe, robots reduce job separation rates and increase job findings, particularly in Eastern and Southern EU countries characterised with low or moderate labour costs. For the green transition, there is evidence that it changes the task profile of occupations (Bachmann et al. 2024b) and the type of skills demanded on the labour market (Marin and Vona 2019). These changes can lead to the emergence of skills gaps with respect to green skills (Vona et al. 2018).

One important adjustment mechanism to structural change is occupational mobility. For example, Cortes (2016) shows for the US labour market that workers switching out of routine occupations experience higher wage growth than workers who stay in these occupations. This implies that occupational mobility has an important role to play in structural transformation as it allows workers to move from declining to growing occupations.

The literature on occupational mobility shows three factors for European countries for the period 2011 to 2014 (Bachmann et al. 2020). First, occupational mobility in Europe is relatively sizeable, with 3% of workers changing occupation (measured at the 2-digit level) from one year to the next. Second, the extent of occupational mobility varies strongly between countries, ranging from around 1% (in Croatia and Romania) to over 6% (Estonia, Sweden). Third, occupational mobility is often accompanied by wage changes, both in an upward and in a downward direction. Given that occupational mobility is associated with wage changes, occupational mobility is not only important for supporting structural change but also matters for worker well-being.

The potential to improve wages through occupational mobility implies that wages are an important determinant of workers' decision to change jobs. Evidence for European countries shows that job-to-job transitions increase individuals' hourly earnings (Diaz-Serrano and Teruel-Carrizosa 2023). The same is true for occupational mobility if it is voluntary. Indeed, this distinction between voluntary and involuntary occupational mobility is crucial. Bachmann et al. (2020) show for a large sample of European countries that voluntary occupational mobility is associated with upward wage mobility, but also show that workers changing occupation involuntarily are more likely to experience a downward rather than an upward earnings transition.

One factor contributing to higher wages after a job change is a better match between a particular worker's skills and the needs of a particular firm. Jinkins and Morin (2018) highlight that changes in the quality of the worker-firm match explain most of the variance in wage growth experienced by job-to-job movers. This result can be viewed as an indication of successful structural change as a higher quality of a worker-firm match is equivalent to a reduction in skill mismatch.

Against this background, the present study investigates occupational mobility and its link to wages and therefore worker well-being for a large sample of European countries. Measures of worker welfare included are wage and the voluntariness of occupational changes. In doing so, it updates the analysis of Bachmann et al. (2020) on occupational mobility of wages to the period up to 2019. Additionally, it discusses the role of working conditions and job satisfaction for occupational mobility, particularly for occupations with labour shortages.

We conduct our empirical analysis for the period 2011-2018. We start in 2011 because of a break in the occupational classification, and end in 2018 (i.e. the latest transitions we consider are transitions from 2018 to 2019) because of the Covid pandemic that started in 2020. Unfortunately, the collection of the crucial variable "Change of job since last year" was discontinued in 2021. Therefore, for the foreseeable future, it is not possible to conduct more up-to-date analyses of job and occupational mobility as we do in this study.

2. Data and methods

Our calculations are based on data from the European Union Statistics on Income and Living Conditions (EU-SILC). [1] EU-SILC data annually provide cross-sectional and longitudinal information on sociodemographic characteristics, employment, income, poverty, household composition and other living conditions for all EU member states as well as additionally for some non-EU countries. The data are provided by national statistical offices through personal interviews or by administrative data sources; they are representative for the population in the countries covered, are comparable across

[1] Note that – as indicated in the introduction – we choose this time period for our analysis because there is a break in the ISCO classification in 2011, and because we aim at focusing on a recent period of relative economic stability.

Europe, and comprise more than 550,000 individual observations per year. Detailed information about the EU-SILC data set can be found on the Gesis website[2].

In order to identify labour market dynamics at an individual level, we use the longitudinal version of the EU-SILC data, which is usually based on a four-years rotating panel. Accordingly, each household in the sample participates in the survey for four years and each year one quarter of the households surveyed are replaced by new households. The longitudinal version only contains persons who participated in the survey in two adjacent years. In order to construct a representative data base with a maximum number of observations for the period under consideration, the longitudinal data of single years are combined based on Engel and Schaffner (2012) and the country-specific weighting matrix is adapted accordingly.

We restrict the resulting sample from the EU-SILC to persons between 18 and 65 years of age with dependent employment in two consecutive years between 2011 and 2019 and valid data for the crucial variables, for a total of 18 European countries.[3] Germany cannot be included in the analyses since no longitudinal data are available for the period from 2011 to 2017. Malta and Slovenia only provide occupational codes at the 1-digit ISCO level and have to be dropped accordingly. We also excluded Luxembourg as 45% of the working force that is cross-border workers is not covered by the sample. In addition, we excluded Portugal, Denmark, Croatia, and Romania because of missing values for job and/or occupational mobility in some consecutive years of the study periods. Finally, the United Kingdom is excluded due to Brexit.

In line with the literature, the analyses on occupational mobility are based on the concept of job changes. For example, Longhi and Brynin (2010) demonstrate that occupational codes are error-prone and a definition of occupational changes based on a changed 2-digit ISCO code from one year to another might purely result from a slightly different description of the occupation by the interviewed person, or from a difference in the classification of the occupation by the statistical office. For this reason, occupational changes are usually only coded as such if they go along with a job change.

In the EU-SILC data, interviews are asked two separate questions on whether they have changed their job and whether they have changed their occupation during the last 12 months. A job change covers a

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[2] See https://www.gesis.org/en/missy/metadata/EU-SILC/ for details regarding EU-SILC.

[3] We thus exclude self-employment from the analysis as is standard in the literature (e.g.Kambourov and Manovskii 2008, Longhi and Brynin 2010, Lalé 2012, Groes et al., 2015, Carrillo-Tudela et al., 2016).

change of employer and additionally includes a change of contract with the same employer.[4] We use the job change variable to construct direct job-to-job transitions, i.e. job changes without other intervening spells such as unemployment. Occupational mobility is identified as a self-reported change of occupation given that a direct job-to-job transition has taken place. Conditioning occupational mobility on job mobility is particularly important in our data set because we find that within-job occupational mobility at both the 1-digit and the 2-digit level is relatively high, which is in line with findings in the literature using other data sets (e.g. Longhi and Brynin 2010, Groes et al. 2015).

Given a job change, we code an occupational change as a change in the 2-digit ISCO code of the ISCO-08 classification. The 2-digit ISCO code is the finest information on occupations contained in the EU-SILC data. While Carrillo-Tudela et al. (2016) use 1-digit Standard Occupational Classes and industry categories, Longhi and Brynin (2010) analyse occupational changes on the 2-digit level. Kambourov and Manovskii (2008), Lalé (2012) as well as Groes et al. (2015) use data at three different levels from one up to four digits. While Lalé (2012) argues that the 1- and 2-digit levels provide more accurate data compared to finer codes, Kambourov and Manovskii (2008) prefer the 3-digit level as most relevant for occupation-specific human capital. The extent of occupational mobility increases the finer the level, typically by factor 2 to 3 between each two levels. In qualitative terms, the aggregation level normally does not alter the results.

In order to evaluate different levels of occupational and job mobility, the reason for change is an important information, in addition to and in combination with wage mobility. In line with the literature, we differentiate between voluntary, involuntary, and changes for other reasons. A voluntary job change comes with the intention "to take up or seek [a] better job". Involuntary changes comprise cases where temporary contracts end, employees are obliged by their employer to stop their job or the (family) business is closed, and family reasons such as care for dependent or moving because of the partner's new job or because of marriage. Other reasons are not further specified in the EU-SILC data. Here, we define voluntary changes as those job transitions requested by the employee, or cases in which the employee resigned or the termination of the old job was mutually agreed upon by employee and employer. Involuntary changes include situations in which the old contract was terminated by the employer, the company closed down or transferred the employee, a temporary job or contract expired

[4] Distinguishing between changes of employers and changes within the same firm is not possible, however.

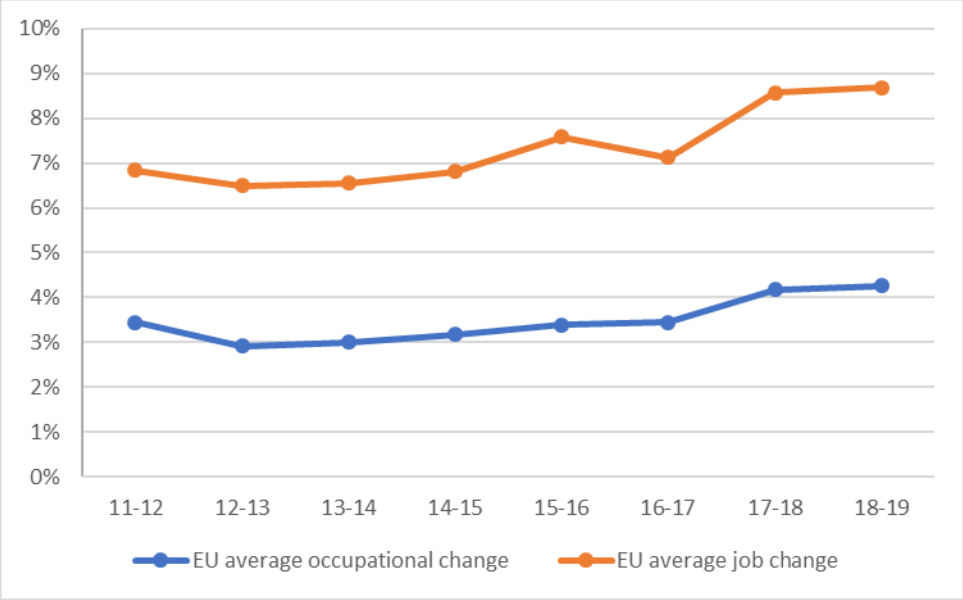
or a training was completed, or when a job was ended because of leave such as maternity or paternity leave. Other job changes are those where no specific reason is given by the interviewed job changer.

When linking occupational to wage mobility, we define transitions between deciles of the country-specific distribution of earnings from paid work in each year of the longitudinal data (i.e. also here, excluding self-employment). The EU-SILC data set contains information on the individual annual gross income from all types of paid labour and includes, in addition to the salary, other payments made by the employer, such as overtime, holiday allowance, 13th and 14th monthly salary, Christmas bonuses, profit participation and cash bonuses. Finally, we restrict our analysis of wage mobility to full-time workers, as the EU-SILC data do not provide information on working hours, which prevents to compare earnings with part-time workers.

3. Occupational mobility in Europe: Extent and individual-level determinants

We define occupational mobility as a change of occupation at the 2-digit ISCO level, given that an individual is employed in two consecutive years and makes a job change between these two years. As depicted in Figure 1, the European averages of direct job-to-job mobility and of occupational mobility for the period 2011-2018 lie around 7-9% and 3-4%, respectively. Furthermore, between the periods 2011-2014 and 2015-2018, job and occupational mobility slightly increased. (Figure 1).

Figure 1. Job mobility and occupational mobility rates over time (all employees 2011-2018

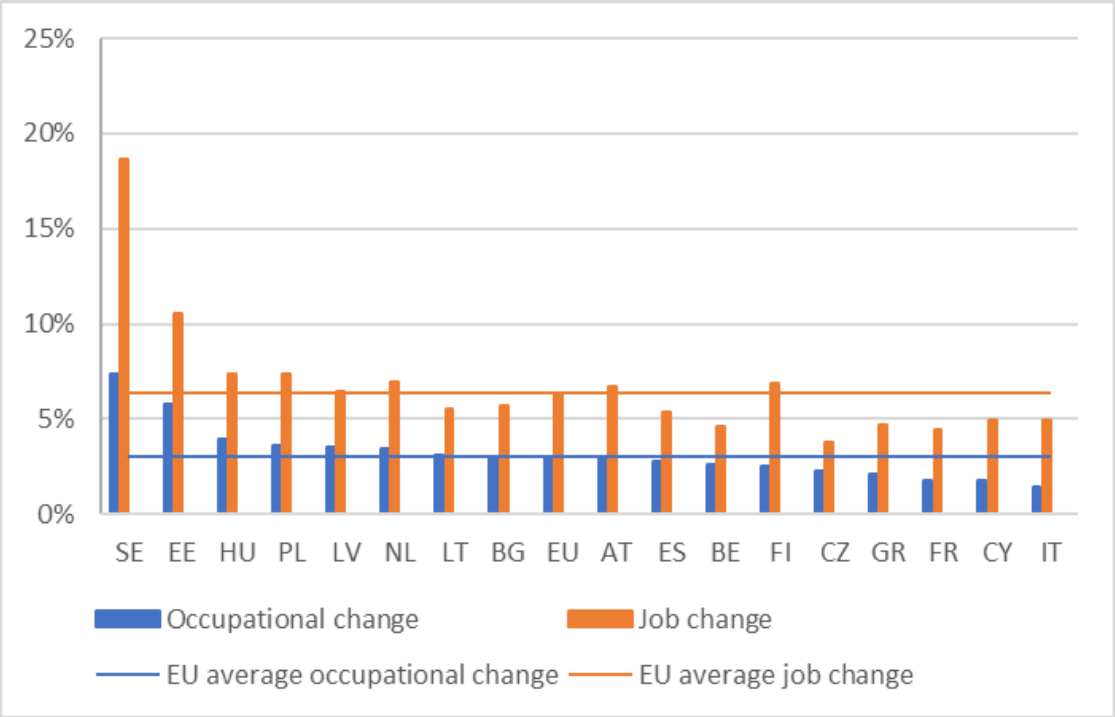


Notes: Probabilities for persons with dependent employment in at least two consecutive years to change occupation or job. Own calculations based on EU-SILC data for the years t: 2011 (t+1: 2012) to t: 2018 (t+1: 2019).

Occupational mobility also displays a high variation across countries: In the period 2015-2018, the lowest rate is observed in Italy (close to 0%) while the highest rate is observed in Sweden (9%) (Figure 3). This country already recorded high levels of occupational mobility in the period 2011-2014 (Figure 2).

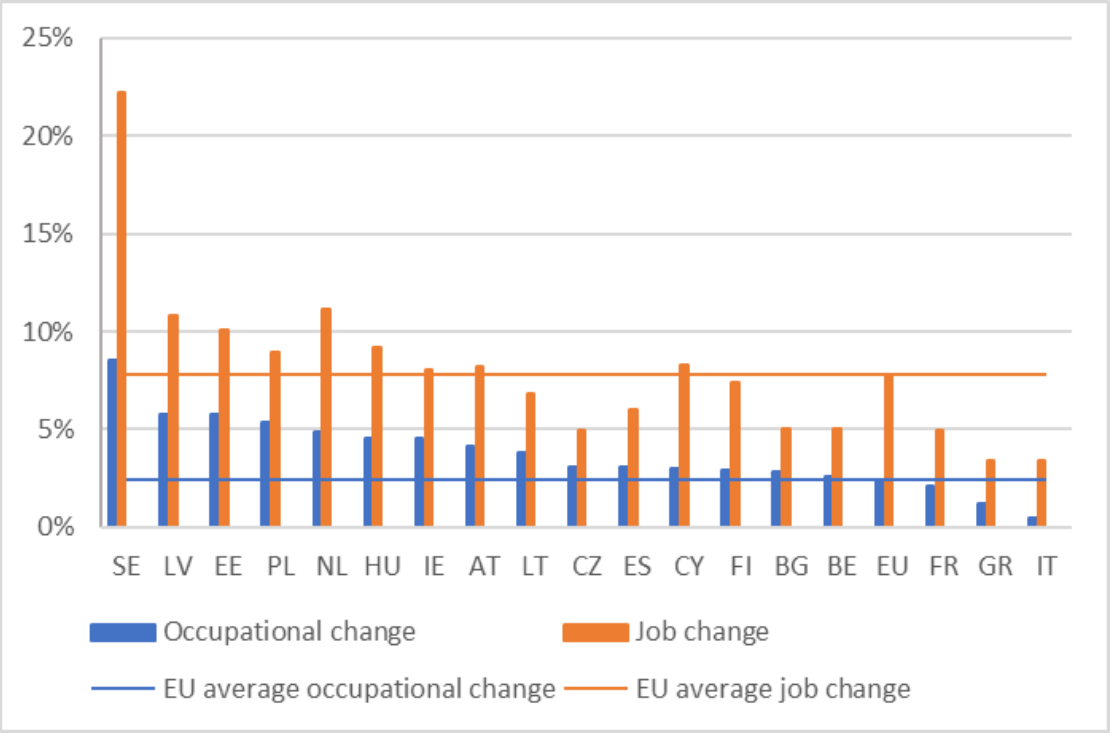
By contrast, occupational mobility has strongly increased in Latvia and the Netherlands between 2011-2014 and 2015-2018, rising from 4% to 6% and from 3% to 5%, respectively. As in the earlier period, also in the later period some Eastern European countries such as Hungary, Poland and Estonia show above-average occupational mobility, whereas the measure is below-average for some Southern European countries, with Greece and Italy showing the lowest rates.

Figure 2. The probability of occupational and of job change (all employees) 2011-2014



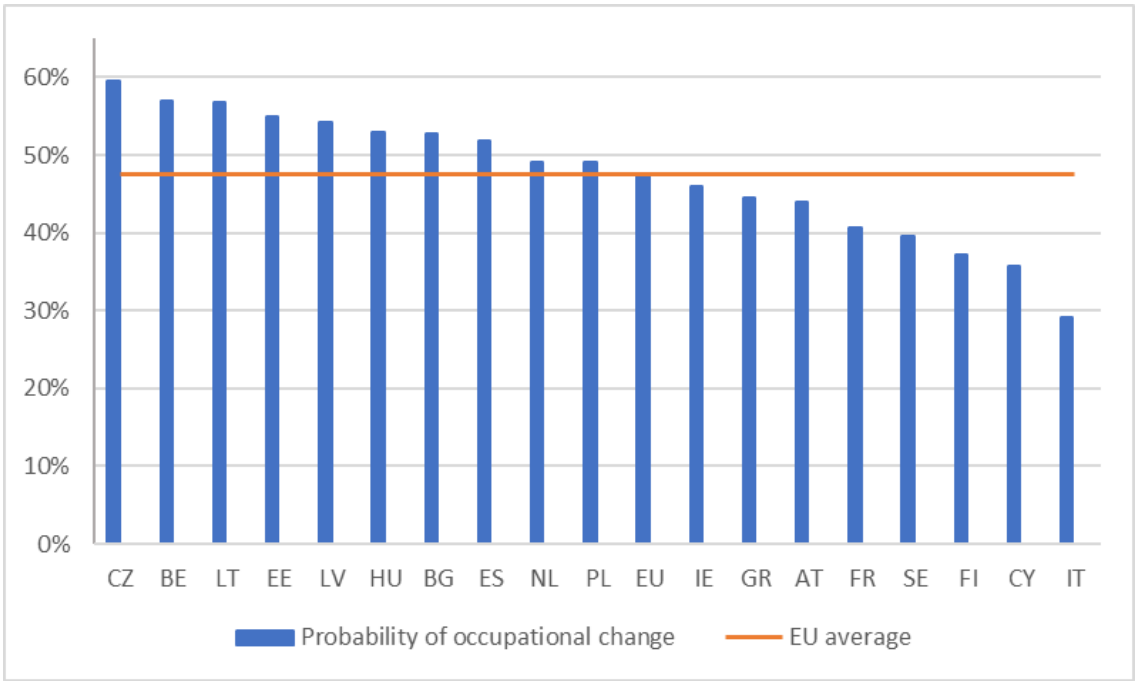
Notes: Probabilities for persons with dependent employment in at least two consecutive years to change occupation or job. The horizontal lines depict the unweighted average across all country values in the sample ("EU"). Own calculations based on EU-SILC data for the years t: 2011 (t+1: 2012) to t: 2014 (t+1: 2015)

Figure 3. The probability of occupational and of job change (all employees) 2015-2018



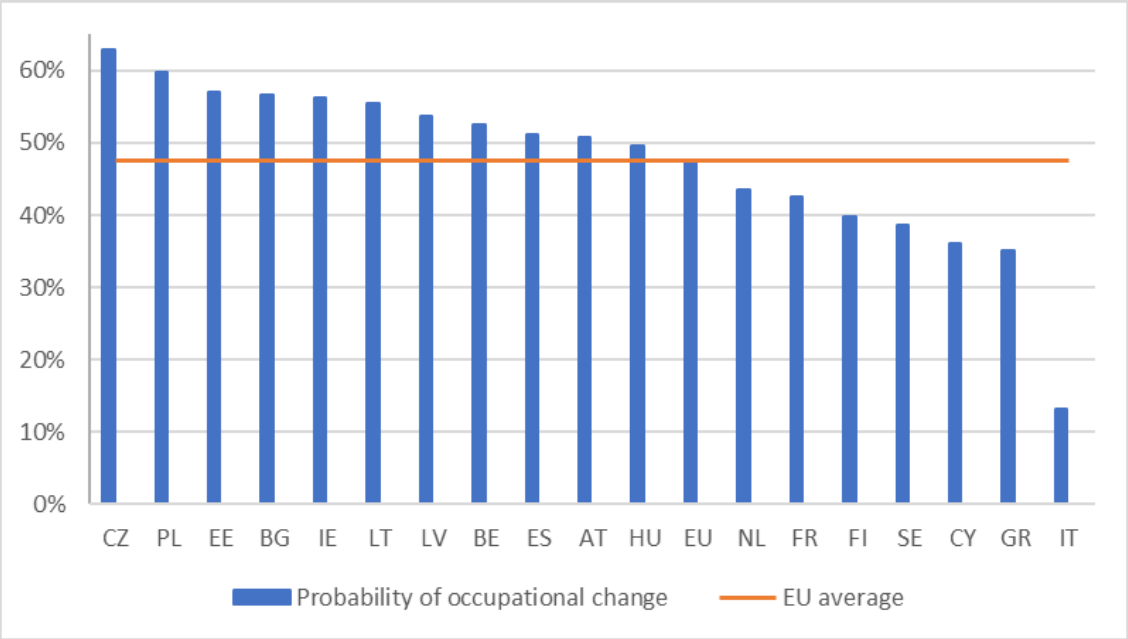
Notes: Probabilities for persons with dependent employment in at least two consecutive years to change occupation or job. The horizontal lines depict the unweighted average across all country values in the sample ("EU"). Own calculations based on EU-SILC data for the years t: 2015 (t+1: 2016) to t: 2018 (t+1: 2019)

Figure 4. The probability of occupational change given job change 2011-2014



Notes: Probabilities for persons with dependent employment in at least two consecutive years to change occupation, given a job change. The horizontal line depicts the unweighted average across all country values in the sample ("EU"). Own calculations based on EU-SILC data for the years t: 2011 (t+1: 2012) to t: 2014 (t+1: 2015)

Figure 5. The probability of occupational change given job change, 2015-2018



Notes: Probabilities for persons with dependent employment in at least two consecutive years to change occupation, given a job change. The horizontal line depicts the unweighted average across all country values in the sample ("EU"). Own calculations based on EU-SILC data for the years t: 2015 (t+1: 2016) to t: 2018 (t+1: 2019)

Given that our measure of occupational mobility is conditional on job mobility, we therefore also depict job mobility in Figures 2 and 3. As in Figure 1, it becomes apparent that job mobility in Europe is more than twice as large as occupational mobility. EU-average job mobility was 6% in 2011-2014 and increased to 8% in 2015-2018. Given the probability of an occupational change of 2% and of a job change probability of 8% per year for the period 2015-18, and an average working life of 35.9 years (Eurostat 2025), the average European can expect to change her or his occupation 0.7 times and the job 2.9 times during his or her career.

Relating occupational mobility to job mobility shows the occupational mobility "yield" per job change. Dividing the probability of an occupational change by the probability of a job change makes clear that nearly half of all job changes are accompanied by an occupational change (Figures 4 and 5). This figure is stable between the two periods (47%).

Figures 4 and 5 also show that the cross-country variation for occupational mobility conditional on job mobility is lower than the cross-country variation for occupational mobility. This implies that the cross-country variation in occupational mobility is driven by differences in job-to-job transitions rather than differences in occupational mobility conditional on making a job-to-job transition.

Taken together, the results up to now show that job and occupational mobility have slightly increased over time. To investigate potential reasons for this development, we analyse the importance of worker

characteristics and their development over time. To do so, we run the following logistic regressions for transition y_{it} of individual i at time t in country c:

$$\boldsymbol{Pr(y_{it} = 1|X_{it}, \gamma_c, \delta_t) = \Lambda(\alpha + \beta_1 X_{it} + \beta_2 \gamma_c + \beta_3 \delta_t)} \qquad (1)$$

where $\Lambda(.)$ is the logistic cumulative density function with $\lambda(z) = e^z/(1+e^z)$. We control for individual and household characteristics X_{it}, i.e. gender, age, education, marital status, the number of children in the household, the presence of young children, part-time employment and the occupation (measured at the 1-digit ISCO level) before the transition. The latter variable controls for compositional differences between countries in terms of occupational shares in total employment. Moreover, country-level GDP growth γ_c and year fixed effects δ_t are included to control for differences in economic conditions between countries and over the business cycle. It is however not possible to control for firm characteristics as these are not included in the EU-SILC data. Standard errors are clustered at the household level.

The regression results for occupational mobility in Table 1 show that the coefficients for the control variables are broadly in line with findings from the literature (e.g. Carrillo-Tudela et al. 2016; Groes et al. 2015; Kambourov and Manovskii 2008): Women are less occupationally mobile than men and married individuals are less mobile than unmarried individuals. Moreover, younger workers are more mobile than older workers, and workers with a higher education level are more mobile than workers with a lower education level. Finally, persons with part-time contracts show higher occupational mobility than full-time employees, which is in line with evidence from the UK (Connolly and Gregory 2008).

Table 1. The determinants of occupational change

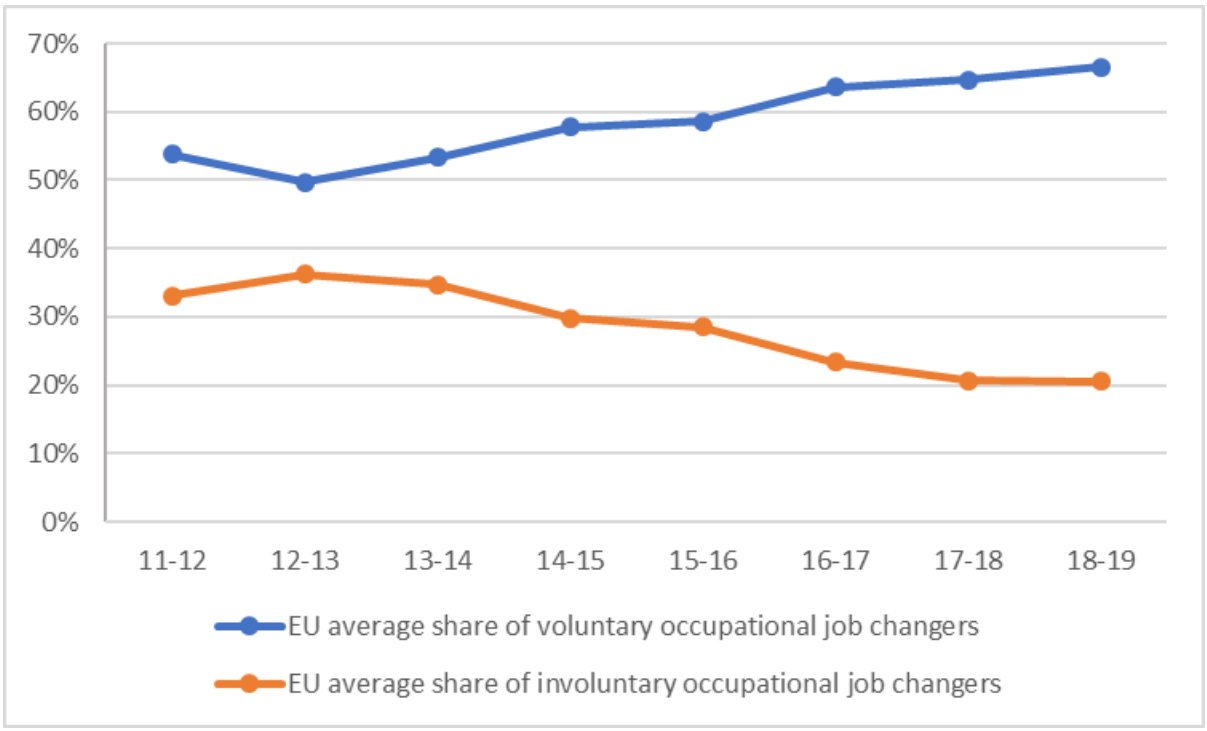
	2011-2014		2015-2018	
	Marg. effect	S.E.	Marg. effect	S.E.
Gender (Ref. group: men)				
Women	-0.0073***	(0.0012)	-0.0022*	(0.0012)
Age group (Ref. group: age 25-39)				
Age 18-24	0.0390***	(0.0038)	0.0345***	(0.0037)
Age 40-54	-0.0167***	(0.0012)	-0.0213***	(0.0015)
Age 55-65	-0.0219***	(0.0014)	-0.0298***	(0.0015)
Education level (Ref. group: medium qualification)				
Low qualification	0.0043**	(0.0017)	0.0002	(0.0016)
High qualification	0.0057***	(0.0016)	0.0067***	(0.0015)
In couple status (Ref. group: single)				
In couple	-0.0043***	(0.0013)	-0.0049***	(0.0014)
Household characteristics				
Number of children	0.0001	(0.0007)	-0.0003	(0.0008)
Youngest child between 0 and 3	0.0006	(0.0018)	-0.0048**	(0.0019)
(Ref. group: no children in age group)				

	2011-2014		2015-2018	
Youngest child between 4 and 6	-0.0033*	(0.0020)	-0.0006	(0.0023)
(Ref. group: no children in age group)				
Occupation (Ref. group: service and sales workers, 1-digit ISCO code5)				
Managers (1)	0.0057*	(0.0032)	0.0049	(0.0032)
Professionals (2)	-0.0143***	(0.0017)	-0.0147***	(0.0019)
Technicians and associates (3)	-0.0050***	(0.0019)	-0.0053***	(0.0019)
Clerical support workers (4)	0.0031	(0.0022)	0.0050**	(0.0023)
Skilled agricultural, forestry and fishery workers (6)	0.0015	(0.0044)	0.0193***	(0.0065)
Craft and related trade workers (7)	-0.0030	(0.0020)	-0.0027	(0.0021)
Plant and machine operators, and assemblers (8)	-0.0082***	(0.0019)	-0.0028	(0.0021)
Elementary occupations (9)	0.0127***	(0.0027)	0.0137***	(0.0026)
Job characteristics (Ref. group: full-time contract)				
Part-time contract	0.0095***	(0.0016)	0.0050***	(0.0016)
Further controls				
GDP growth	0.0001	(0.0005)	-0.0000	(0.0002)
Year FE	Yes		Yes	
Country FE	Yes		Yes	
Observations	249.828		275.209	

Notes: Marginal effects for the probability to change occupation from a logit model including country fixed effects. Standard errors are clustered on the household level. */**/*** denote statistical significance at the 10%/5%/1% significance level. Own calculations based on EU-SILC data. Separate regressions for the years 2011-2014 and 2015-2018.

Regarding differences between the periods analysed, it becomes apparent that the differences between some socio-economic groups are smaller in the period 2015-2018 than in the period 2011-2014. This is for example the case for the gender difference in occupational mobility (which remains significant but becomes much smaller in the latter period), the difference between low-skilled and medium-skilled workers (the reference group), and the difference between part-time and full-time workers. These results are in line with existing evidence that the Great Recession had a labour-market impact which differed between socio-economic groups (Bachmann et al. 2015). However, the differences increased in the second period for those over 40 (compared to 25–39-year-olds), for the most highly qualified (compared to medium qualification), and for employees with young children or between occupations.

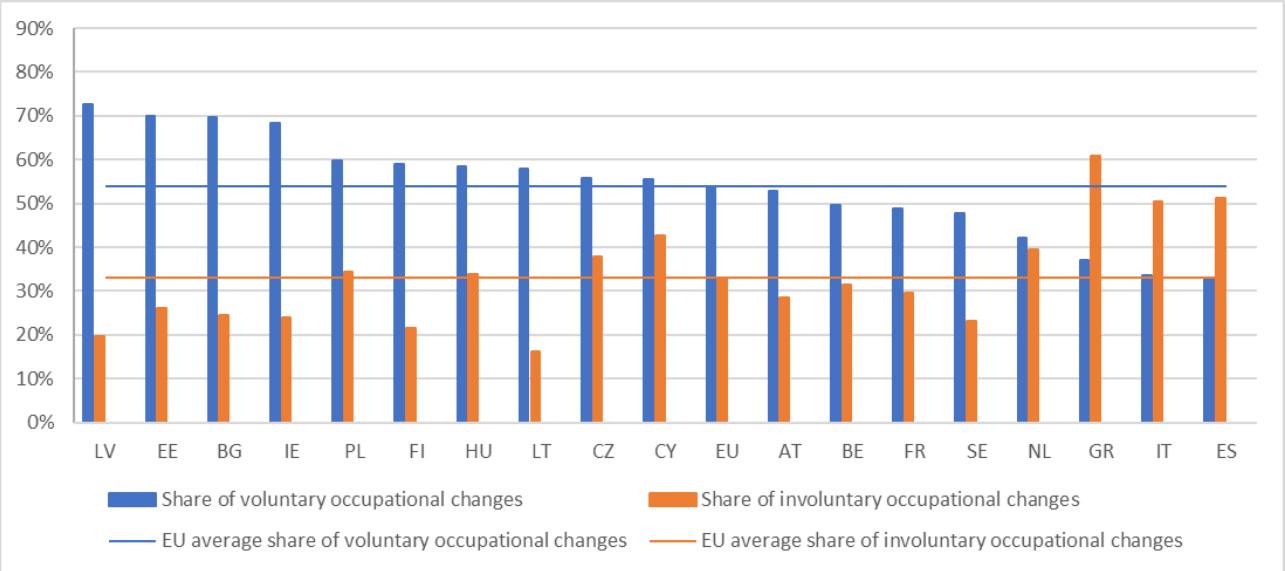
Figure 6. Shares of voluntary and involuntary occupational changes in all occupational changes (all employees)
2011-2018



Notes: Probabilities for persons with dependent employment in at least two consecutive years to change occupation. Own calculations based on EU-SILC data for the years t: 2011 (t+1: 2012) to t: 2018 (t+1: 2019).

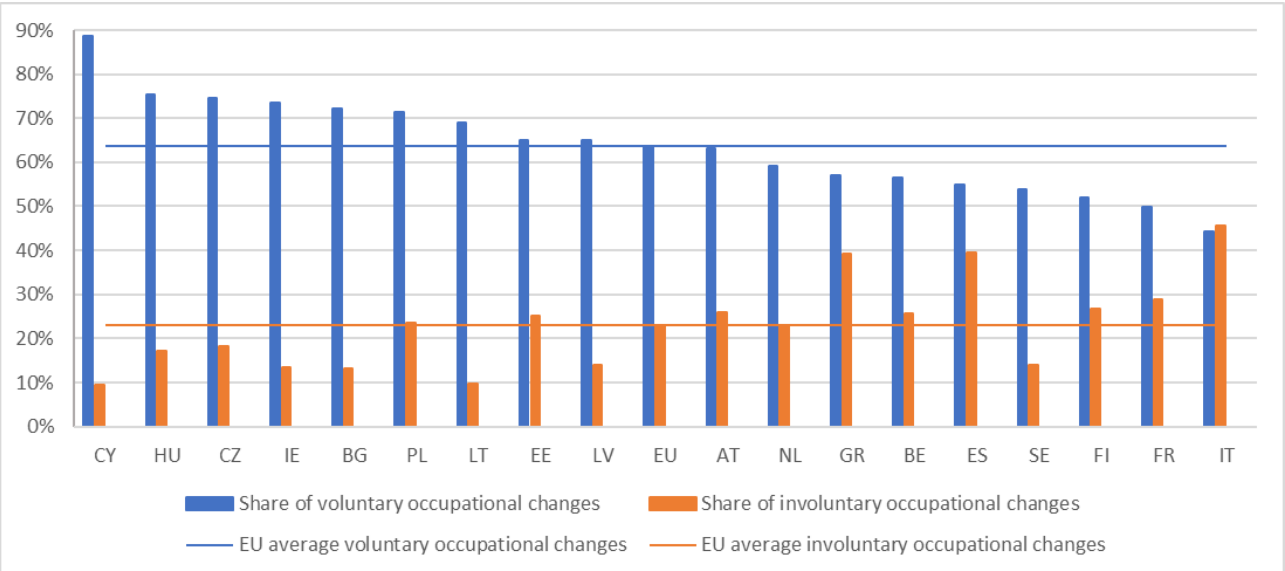
The importance of voluntary and involuntary occupational mobility differs strongly between the two periods considered. As shown in Figures 6-8, the share of involuntary occupation changes in all occupation changes falls over the observation period and was thus considerably higher (33%) in the period 2011-2014 than in the period 2015-2018 (23%). This is mirrored by a lower share of voluntary occupational changes in the first period (54%) than in the second period (64%). The higher share of involuntary occupation changes in the first period reflects a high share of layoffs during the Great Recession (Bachmann et al. 2015) and a stronger role of on-the-job search and thus voluntary job and occupation changes generally observed during cyclical upswings (Krause and Lubik 2006).

Figure 7. Voluntary and involuntary occupational changes, in %
2011-2014



Notes: Probabilities for persons with dependent employment in at least two consecutive years to change occupation for voluntary and involuntary reasons. The horizontal line depicts the unweighted average across all country values in the sample ("EU"). Own calculations based on EU-SILC data for the years t: 2011 (t+1: 2012) to t: 2014 (t+1: 2015).

Figure 8. Voluntary and involuntary occupational changes, in %
2015-2018



Notes: Probabilities for persons with dependent employment in at least two consecutive years to change occupation for voluntary and involuntary reasons. The horizontal line depicts the unweighted average across all country values in the sample ("EU"). Own calculations based on EU-SILC data for the years t: 2015 (t+1: 2016) to t: 2018 (t+1: 2019)

Looking at country differences, it becomes apparent that differences in involuntary occupation changes are much more pronounced in the period 2011-2014 (Figure 7) than in the period 2015-2018 (Figure 8). In particular, the Southern European countries most strongly hit by the Great Recession (Greece, Spain, Italy) display probabilities of involuntary occupation changes of around 50-60%. By contrast, the second period features a much lower share of involuntary occupation changes also in these countries.

The probabilities of voluntary and involuntary occupational changes not only differ by country, but also by socio-economic group. As Table 2 shows, men and women (conditional on other controls) are equally likely to be subject to an involuntary occupational change in both periods, as the marginal effects for gender are small and statistically insignificant. Women have however a lower probability of a voluntary change than men in the period 2015-18. As voluntary occupational mobility is likely to advance one's labour-market career, this means that women are likely to forego potential benefits of occupational mobility.

As for age groups, we find that older workers are less likely to engage in a voluntary occupational change. While younger workers (18–24) do not differ significantly from the reference group, workers aged 40–54 and especially 55–65 are much less likely to experience a voluntary occupational change, with this gap widening in 2015–2018. However, older workers are more likely to experience an involuntary occupational change in the second observation period. This means that older workers not only forego the opportunity to advance their career, but they also are at risk of having to change their job involuntarily. The latter results could indicate that older workers have difficulties adapting to changing requirements cause by e.g. the digital and green transition.

The result that older workers are more likely to experience an involuntary occupational change is mirrored by the experience of low-skilled workers who have a higher probability of an involuntary occupational change than medium-skilled workers in both periods. Furthermore, in both periods, the probability of a voluntary occupational change is lower for low-skilled workers, with the education gap becoming more significant in the later period. By contrast, high-skilled workers have a higher probability of experiencing a voluntary occupational change and a lower probability of experiencing an involuntary occupational change than medium-skilled workers in both periods, though the gap comparing to the reference group is reduced in the later period.

Table 2. The determinants of voluntary or involuntary occupational change

	2011-2014				2015-2018			
	Voluntary change		Involuntary change		Voluntary change		Involuntary change	
	Marg. effect	S.E.	Marg. effect	S.E.	Marg. effect	S.E.	Marg. effect	S.E.
Gender (Ref. group: men)								
Women	-0.0195	(0.0207)	0.0016	(0.0201)	-0.0687***	(0.0188)	0.0275	(0.0179)
Age group (Ref. group: age 25-39)								
Age 18-24	0.0092	(0.0295)	0.0051	(0.0289)	0.0178	(0.0254)	-0.0281	(0.0230)
Age 40-54	-0.0581**	(0.0228)	0.0168	(0.0223)	-0.1027***	(0.0220)	0.0273	(0.0209)
Age 55-65	-0.1597***	(0.0396)	0.0173	(0.0427)	-0.2300***	(0.0338)	0.0646*	(0.0333)
Education level (Ref. group: medium qualification)								
Low qualification	-0.0577*	(0.0313)	0.0563*	(0.0309)	-0.0586**	(0.0283)	0.0885***	(0.0273)
High qualification	0.0977***	(0.0261)	-0.0977***	(0.0243)	0.0530**	(0.0214)	-0.0516**	(0.0202)
In couple status (Ref. group: single)								
In couple	-0.0096	(0.0230)	-0.0041	(0.0232)	0.0187	(0.0213)	-0.0104	(0.0204)
Household characteristics (Ref. group: no children in age group)								
Number of children	0.0074	(0.0130)	-0.0095	(0.0132)	-0.0018	(0.0121)	-0.0034	(0.0114)
Youngest child between 0 and 3	-0.0178	(0.0325)	-0.0097	(0.0308)	0.0242	(0.0320)	-0.0243	(0.0299)
Youngest child between 4 and 6	0.0278	(0.0372)	-0.0138	(0.0371)	0.0269	(0.0356)	-0.0457	(0.0331)
Job characteristics (Ref. group: full-time contract)								
Part-time contract	-0.0138	(0.0263)	0.0250	(0.0257)	-0.0031	(0.0233)	0.0089	(0.0223)
Further controls								
GDP growth	0.0017	(0.0085)	0.0045	(0.0083)	0.0045	(0.0044)	-0.0032	(0.0043)
Year 2012	-0.0458	(0.0354)	0.0773**	(0.0335)				
Year 2013	-0.0412	(0.0334)	0.0803**	(0.0315)				
Year 2014	0.0425	(0.0260)	0.0027	(0.0254)				
Year 2016					0.0541**	(0.0249)	-0.0390*	(0.0228)
Year 2017					0.0985***	(0.0232)	-0.1066***	(0.0216)
Year 2018					0.0896***	(0.0254)	-0.0674***	(0.0237)
Country and occupation of origin FE	Yes				Yes			
Observations	6.699				8.375			

Notes: Marginal effects for the probability to change voluntarily or involuntarily occupation from a mlogit model including country fixed effects. Standard errors are clustered on the household level. */**/*** denote statistical significance at the 10%/5%/1% significance level. Own calculations based on EU-SILC data. Separate regressions for the years 2011-2014 and 2015-2018.

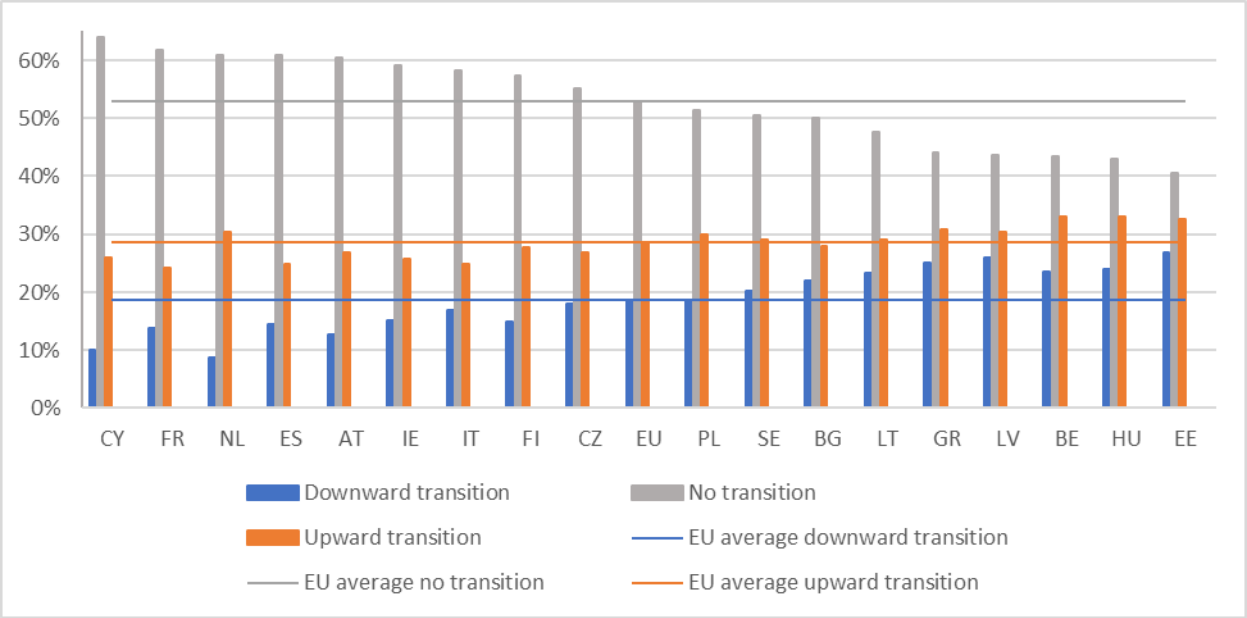
4. Occupational mobility and wage transitions

One of the most important consequences of occupational change are wage changes. We therefore provide evidence on wage changes in general as well as the link between job changes and occupational changes on the one hand and wage changes on other hand. Following Buchinsky and Hunt (1999), we define a wage transition as a switch from one decile of the country- and year-specific wage distribution to another decile, independently of occupational change. To provide comparable figures across countries, we focus on full-time workers in most of the following analyses.

Figures 9 and 10 illustrate wage mobility among all full-time employees and provide an overview of the extent of wage transitions in EU countries for the time periods 2011-2014 and 2015-18. On average, more than half of European workers do not experience such a transition from one year to the next, i.e. their wage change is zero or relatively small. The change in the share of workers not experiencing a wage transition between 2011-2014 and 2015-18 is relatively small, amounting to 53% in the first period and 51% in the second period. The remaining workers experience the same upward transition (29%) or downward transition (19%) in both periods.

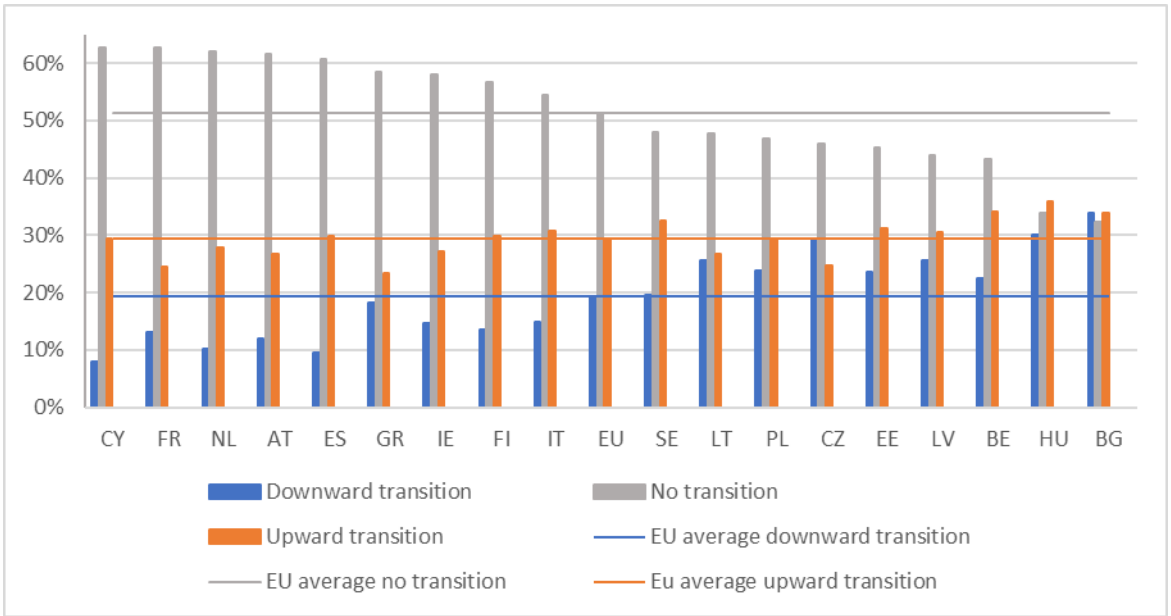
The variation in wage transitions between countries is relatively large. Countries with low wage transitions feature a probability of no transition of around 60-64% (e.g. Cyprus, Austria, France, the Netherlands, Spain) and thus display the highest wage stability. By contrast, other countries feature probabilities of no transition as low as 40% in the first period, and 32-40% in the second period, reflecting much higher wage mobility. Such low probabilities can mainly be observed for Greece, Lithuania, Latvia, Hungary, and Estonia.

Figure 9. Wage mobility, full-time employees, in %
2011-2014



Notes: Probabilities for full-time individuals with dependent employment in at least two consecutive years to experience a downward transition, no transition or an upward transition between the deciles of the wage distribution. The horizontal line depicts the unweighted average across all country values in the sample ("EU"). Own calculations based on EU-SILC data for the years t: 2011 (t+1: 2012) to t: 2014 (t+1: 2015).

Figure 10. Wage mobility, full-time employees, in %
2015-2018



Notes: Probabilities for full-time individuals with dependent employment in at least two consecutive years to experience a downward transition, no transition or un upward transition between the deciles of the wage distribution. The horizontal line depicts the unweighted average across all country values in the sample ("EU"). Own calculations based on EU-SILC data for the years t: 2015 (t+1: 2016) to t: 2018 (t+1: 2019)

Given the differences in mobility behaviour between socio-economic groups, differences in wage mobility also seem likely. To investigate this issue, we follow Bachmann et al. (2016) and run a

multinomial regression model with the probability of upward, no change, and downward wage mobility (i.e. transition *j*) as dependent variables:

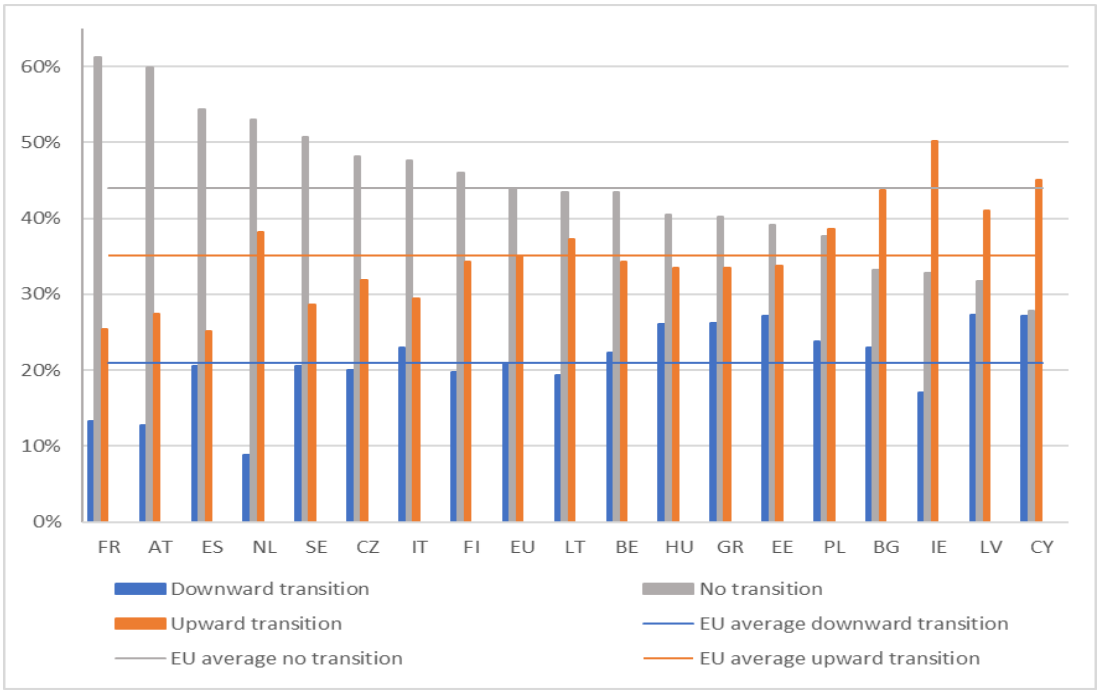
$$\mathrm{P}\left(y_{j,it}=1\middle|X_{it},\gamma_c,\delta_t\right)=\frac{\mathrm{e}^{\alpha_j+\beta_{j,1}X_{it}+\beta_{j,2}\gamma_c+\beta_{j,3}\delta_t}}{\sum_{j=1}^{3}e^{\alpha_j+\beta_{j,1}X_{it}+\beta_{j,2}\gamma_c+\beta_{j,3}\delta_t}} \quad (2)$$

As in Equation 1, we again control for individual and household characteristicsX_{it}, GDP growth γ_c and include year fixed effects δ_t. The results in Table 3 show that women (compared to men) are more likely to experience a downward wage transition, and less likely to experience an upward wage transition in both periods, indicating a persistent gender wage-mobility disadvantage. Low-skilled workers exhibit a similar pattern: they are significantly more likely to move downward and significantly less likely to move upward than medium-skilled workers in both periods. By contrast, high-skilled workers have a higher probability of an upward wage transition and lower probability of a downward wage transition than medium-skilled workers.

It also becomes apparent that a change of occupation is associated with a lower probability of making no wage transition, and higher probabilities of both upward and downward transitions. Comparing the two time periods shows that the correlation between a downward wage transition and occupational change is slightly higher in the first period. However, the relationship with upward transitions differs across periods. Occupational change is not associated with upward mobility in 2011–2014 but becomes positively associated with upward transitions in 2015–2018. These results are in all likelihood due to general economic conditions, i.e. the Great Recession during the first observation period, and the prolonged economic recovery in the second observation period.

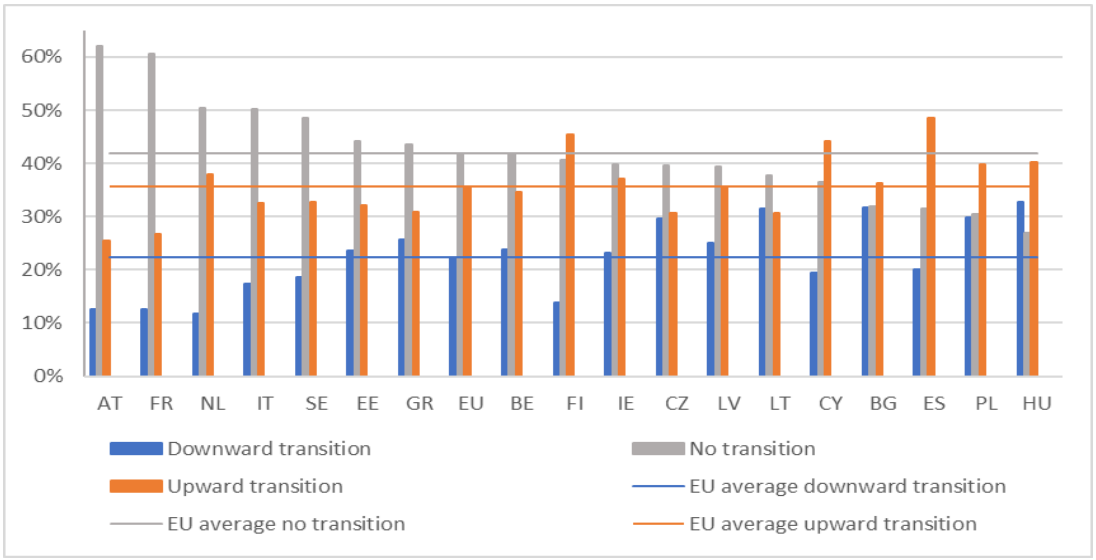
To further investigate the link between wage transitions and occupational mobility, we display the wage mobility of workers experiencing an occupation change in Figures 11 and 12. It becomes apparent that amongst the workers who change their occupation, only 44% (2011-2014) and 42% (2015-18) remain in the same wage decile, i.e. wage stability is considerably lower than for all workers. While upward wage transitions can be observed for 35% (2011-2014) and 36% (2015-2018) of occupation changers, downward transitions represent 21% of occupation changes in the first period and 22% in the second period. Thus, downward transitions are relatively more frequent among occupation changers than among the overall workforce, a finding already established by Longhi and Brynin (2010) for the UK and Germany. However, occupational change also provides opportunities for wage gains, confirming findings for Germany (Bachmann et al. 2025).

Figure 11. Wage mobility of occupation changers, full-time employees, in % 2011-2014



Notes: Probabilities for full-time individuals with dependent employment in at least two consecutive years who change occupation to experience a downward transition, no transition or un upward transition between the deciles of the wage distribution. The horizontal line depicts the unweighted average across all country values in the sample ("EU"). Own calculations based on EU-SILC data for the years t: 2011 (t+1: 2012) to t: 2014 (t+1: 2015)

Figure 12. Wage mobility of occupation changers, full-time employees, in % 2015-2018



Notes: Probabilities for full-time individuals with dependent employment in at least two consecutive years who change occupation to experience a downward transition, no transition or un upward transition between the deciles of the wage distribution. The horizontal line depicts the unweighted average across all country values in the sample ("EU"). Own calculations based on EU-SILC data for the years t: 2015 (t+1: 2016) to t: 2018 (t+1: 2019)

In our European sample, we again observe a large cross-country variation. France and Austria display the highest level of wage stability (around 61-62% of occupation changers stay in the same wage decile); whereas Hungary is at the lower end of the spectrum with only 27% of occupation changers staying in the same wage decile in the later period.

In the final step of our general analysis of occupational mobility and wage mobility, we use the wage transition regression from Equation 2 and perform separate regressions, including (i) a dummy of job mobility, (ii) a dummy for occupational mobility and (iii) dummies for voluntary and involuntary occupational mobility (Table 4). It becomes apparent that job movers have a lower earnings stability than individuals who do not change their job, and higher probabilities of both upward and downward wage transitions: In both periods, job movers have a higher probability of a downward wage transition, and in the second period they also have a higher probability of an upward wage transition, confirming that job mobility substantially raises wage volatility.

If workers change occupation, their earnings stability is comparable to the earnings stability of persons who only change their job but not their occupation (Table 4, Specification B). However, the magnitudes differ. Workers with an occupational change feature a slightly higher probability of a downward wage transition and a lower probability of no transition than workers with a job change alone. The higher probability of a downward wage transition for workers who change occupation could be caused by the loss of returns to occupational tenure found in the literature (Kambourov and Manovskii 2009).

Workers with occupational change experience only a small but significantly higher probability of an upward wage transition in the second period than workers without occupational change, while no significant difference with respect to upward wage transitions is observed in the first period. The relatively low probability of an upward wage transition for workers who change occupation could come about by our job change variable capturing occupational change within 2-digit occupations. Such occupational changes, in particular vertical occupational mobility, i.e. upward movements along the job hierarchy within an occupation, have been shown to yield significant wage gains (Bachmann et al. 2025).

Finally, Table 4, Specification C shows how the probability of wage transitions changes with the voluntariness of occupational change. It becomes clear that voluntary occupational change (compared to no occupational change) is associated with an increase of the probability of an upward wage transition in both periods. However, voluntary occupational change is also significantly correlated with the probability of a downward wage transition.

Table 3. Determinants of wage mobility, including occupational change

	2011-2014						2015-2018					
	Downward transition		No transition		Upward transition		Downward transition		No transition		Upward transition	
	Marg. effect	S.E.	Marg. effect	S.E.	Marg. effect	S.E.	Marg. effect	S.E.	Marg. effect	S.E.	Marg. effect	S.E.
Gender (Ref. group: men)												
Women	0.0216***	(0.0027)	0.0266***	(0.0038)	-0.0482***	(0.0030)	0.0226***	(0.0025)	0.0272***	(0.0036)	-0.0498***	(0.0030)
Age group (Ref. group: age 25-39)												
Age 18-24 (Ref. Age 25-39)	0.0312***	(0.0089)	-0.0416***	(0.0104)	0.0104	(0.0074)	0.0356***	(0.0089)	-0.0607***	(0.0099)	0.0251***	(0.0075)
Age 40-54	-0.0242***	(0.0031)	0.0521***	(0.0043)	-0.0279***	(0.0034)	-0.0242***	(0.0030)	0.0522***	(0.0043)	-0.0279***	(0.0036)
Age 55-65	-0.0223***	(0.0042)	0.0732***	(0.0061)	-0.0509***	(0.0048)	-0.0222***	(0.0037)	0.0725***	(0.0056)	-0.0503***	(0.0046)
Education level (Ref. group: medium qualification)												
Low qualification (Ref. Medium qualification)	0.0306***	(0.0045)	0.0039	(0.0055)	-0.0345***	(0.0039)	0.0408***	(0.0046)	-0.0047	(0.0055)	-0.0361***	(0.0040)
High qualification	-0.0529***	(0.0029)	-0.0380***	(0.0047)	0.0909***	(0.0041)	-0.0526***	(0.0027)	-0.0351***	(0.0042)	0.0876***	(0.0037)
In couple status (Ref. group: single)												
In couple (Ref. Single)	-0.0004	(0.0031)	-0.0124***	(0.0045)	0.0127***	(0.0035)	-0.0128***	(0.0029)	0.0039	(0.0043)	0.0089**	(0.0036)
Household characteristics (Ref. group: no children in age group)												
Number of children	-0.0050**	(0.0019)	0.0009	(0.0027)	0.0041*	(0.0021)	-0.0043**	(0.0018)	-0.0027	(0.0025)	0.0071***	(0.0021)
Youngest child between 0 and 3	0.0150***	(0.0047)	-0.0180***	(0.0069)	0.003	(0.0056)	0.0232***	(0.0049)	-0.0313***	(0.0069)	0.008	(0.0057)
Youngest child between 4 and 6	0.001	(0.0053)	0.0084	(0.0071)	-0.0094	(0.0060)	-0.0041	(0.0053)	0.0131	(0.0080)	-0.0091	(0.0067)
Wage decile of previous job (Ref. group: decile 5)												
Decile 1	-0.1982***	(0.0042)	-0.1437***	(0.0094)	0.3419***	(0.0089)	-0.2072***	(0.0040)	-0.1002***	(0.0086)	0.3074***	(0.0084)
Decile 2	-0.1330***	(0.0049)	0.0001	(0.0086)	0.1330***	(0.0079)	-0.1308***	(0.0047)	-0.0016	(0.0081)	0.1324***	(0.0079)
Decile 3	-0.0630***	(0.0055)	0.0105	(0.0085)	0.0525***	(0.0077)	-0.0480***	(0.0055)	-0.0166**	(0.0081)	0.0645***	(0.0077)
Decile 4	-0.0171***	(0.0061)	-0.0088	(0.0079)	0.0260***	(0.0071)	-0.0250***	(0.0055)	-0.0053	(0.0079)	0.0302***	(0.0077)
Decile 6	0.0287***	(0.0064)	-0.0037	(0.0082)	-0.0250***	(0.0072)	0.0205***	(0.0059)	0.0141*	(0.0077)	-0.0346***	(0.0072)
Decile 7	0.0344***	(0.0061)	0.0346***	(0.0079)	-0.0690***	(0.0067)	0.0247***	(0.0059)	0.0546***	(0.0077)	-0.0793***	(0.0069)
Decile 8	0.0312***	(0.0061)	0.0798***	(0.0082)	-0.1110***	(0.0066)	0.0183***	(0.0058)	0.1155***	(0.0075)	-0.1337***	(0.0065)
Decile 9	0.0219***	(0.0061)	0.1421***	(0.0080)	-0.1640***	(0.0063)	0.0146**	(0.0060)	0.1851***	(0.0077)	-0.1997***	(0.0063)

	2011-2014						2015-2018					
Decile 10	-0.0152**	(0.0067)	0.3114***	(0.0080)	-0.2962***	(0.0052)	-0.0234***	(0.0060)	0.3483***	(0.0071)	-0.3249***	(0.0052)
Job characteristics (Ref. group: no occupational change)												
Occupational change	0.1032***	(0.0076)	-0.0951***	(0.0113)	-0.0081	(0.0100)	0.0887***	(0.0070)	-0.1096***	(0.0102)	0.0209**	(0.0086)
Further controls												
GDP growth	-0.0022***	(0.0009)	0.0024*	(0.0013)	-0.0001	(0.0011)	-0.0011	(0.0007)	-0.0019**	(0.0009)	0.0031***	(0.0008)
Year 2012	-0.0037	(0.0042)	0.0332***	(0.0056)	-0.0295***	(0.0050)						
Year 2013	-0.0146***	(0.0039)	0.0396***	(0.0053)	-0.0251***	(0.0047)						
Year 2014	-0.0070**	(0.0034)	0.0285***	(0.0046)	-0.0215***	(0.0040)						
Year 2016							-0.0099***	(0.0036)	-0.0054	(0.0045)	0.0153***	(0.0042)
Year 2017							0.0172***	(0.0033)	-0.0093**	(0.0046)	-0.0079*	(0.0041)
Year 2018							0.0080**	(0.0033)	-0.0193***	(0.0047)	0.0113***	(0.0042)
Country FE	Yes						Yes					
Observations	208.858						230.698					

Notes: Marginal effects for the probability to have a wage mobility from a mlogit model including country fixed effects. Standard errors are clustered on the household level. */**/*** denote statistical significance at the 10%/5%/1% significance level. Own calculations based on EU-SILC data. Separate regressions for the years 2011-2014 and 2015-2018.

Table 4. Determinants of wage mobility: Job change and occupational change by voluntariness

	2011-2015						2015-2018					
	Downward transition		No transition		Upward transition		Downward transition		No transition		Upward transition	
	Marg. effect	S.E.	Marg. effect	S.E.	Marg. effect	S.E.	Marg. effect	S.E.	Marg. effect	S.E.	Marg. effect	S.E.
Specification A												
Job change	0.1009**	-0.0054	-0.0991***	(0.0079)	-0.0019	-0.0069	0.0835***	-0.005	-0.1100***	-0.0072	0.0266***	-0.0062
Specification B												
Occupational change	0.1032***	(0.0076)	-0.0951***	(0.0113)	-0.0081	-0.01	0.0887***	(0.0070)	-0.1096***	(0.0102)	0.0209**	(0.0086)
Specification C												
Voluntary occ. change	0.0685***	(0.0135)	-0.1066***	(0.0150)	0.0381***	(0.0135)	0.0753***	(0.0105)	-0.1067***	(0.0118)	0.0315***	(0.0103)
Involuntary occ. change	0.2575***	(0.0203)	-0.1637***	(0.0198)	-0.0938***	(0.0133)	0.1795***	(0.0244)	-0.1483***	(0.0245)	-0.0312*	(0.0178)
Other job change	0.0715***	(0.0237)	-0.0477	(0.0305)	-0.0237	(0.0255)	0.1267***	(0.0269)	-0.1214***	(0.0276)	-0.0053	(0.0231)
Observations by regression	208.858						230.698					

Notes: Marginal effects for the probability to have a wage mobility from mlogit models including country fixed effects. Standard errors are clustered on the household level. */**/*** denote statistical significance at the 10%/5%/1% significance level. Own calculations based on EU-SILC data. Separate regressions for the years 2011-2014 and 2015-2018. Separate regressions for each specification. The detailed results from specification B are presented in Table 3.

For involuntary occupational transitions, the probability of a downward wage transition increases much more strongly, and the probability of an upward wage transition decreases, significantly in the first period and slightly in the second. Therefore, occupational change offers wage opportunities, especially when it is voluntary, but also poses the risk of wage losses, especially when the change is involuntary. Overall, these results suggest that voluntary occupational mobility enhances wage prospects, whereas involuntary occupational mobility significantly raises the risk of downward wage transitions.

5. Occupational mobility, working conditions and job satisfaction

Up to now, we have analysed occupational mobility and wage mobility in general. For successful structural change, a key question is whether occupational mobility reduces skill shortages. This question has recently been answered for the German labour market by a study using detailed administrative data and a country-specific identification of occupations with skill shortages (Bachmann and Heinze 2025). The study shows for the time period 2011-2019 that worker outflows from occupations with significant shortages of skilled labour to occupations without shortages of skilled labour are higher than worker flows in the opposite direction. Therefore, job-to-job transitions in Germany tend to increase, rather than reduce, skill shortages.

The results in Bachmann and Heinze (2025) show that worker mobility between occupations does not automatically reduce skills gaps. It is therefore essential to consider the role played by working conditions in labour or skills shortages. A growing body of evidence indicates that working conditions, beyond wages, play a central role in explaining labour and skills shortages.

For instance, Hauret and Martin (2023) analyse the low-skilled occupations in Luxembourg during the period 2019 to 2023. The analysis relies on a combination of administrative and survey data to document labour shortages and working conditions in Luxembourg, with a specific focus on occupations not requiring a university degree. The identification of shortage occupations draws on data provided by the National Employment Agency (ADEM), using vacancy declarations, ratios of registered jobseekers to advertised positions, and job-matching statistics. A profession is considered to be in shortage when at least three vacancies per month are declared on average and the ratio of registered jobseekers to vacancies is below 0.7, or alternatively below 1.1 if more than 15% of job offers remain unfilled over the previous year. To link ADEM data with international occupational classifications, the study uses the official correspondence between the French Répertoire Opérationnel des Métiers et des Emplois (ROME) and the International Standard Classification of Occupations (ISCO).

To assess the role of wages and working conditions in these shortage occupations, the authors use two complementary sources of European microdata. First, the European Structure of Earnings Survey (SES 2018), conducted by STATEC for Eurostat, provides harmonised information on gross hourly wages, wage components (overtime, bonuses, shift work), and allows comparison between resident and cross-border employees in firms with at least ten employees. Second, the European Working Conditions Telephone Survey (EWCTS 2021), coordinated by Eurofound, offers information on job quality dimensions such as pay satisfaction, job security, exposure to physical risks, autonomy, training opportunities, social support, and work-life balance. Because sample sizes for Luxembourg in the EWCTS are limited, the analysis is carried out for the Great Region (Luxembourg, Belgium, France and Germany), under the assumption that differences across occupations within this broader area are approximately those prevailing in Luxembourg.

The study finds that wage levels in shortage occupations are not necessarily lower than in comparable non-shortage occupations. In some cases, they are even slightly higher, and salaries are less dependent on bonuses, overtime, or shift work. These findings suggest that pay alone cannot explain recruitment difficulties. Instead, non-monetary aspects such as safety, job security, flexible working hours, physical workload, etc. may discourage candidates from entering or remaining in certain jobs.

Similarly, Coutrot (2022) highlights that in France, more than half of private-sector occupations facing recruitment difficulties suffer from problems of job attractiveness linked to working conditions. Using the 2019 Working Conditions Survey conducted by Dares, this analysis shows that 71% of employers reported recruitment difficulties, and in one out of two cases, these were explicitly related to unfavourable working conditions rather than to a lack of qualified candidates or unattractive pay. Employers most often report exposure to physical constraints such as repetitive tasks, night work, handling heavy loads, unpredictable working hours, and the impossibility to "do a quality job" ("travail empêché"), which increases recruitment difficulties by more than 30 percentage points compared to employers not affected by this issue. Recruitment problems are particularly important in sectors such as manufacturing, construction, hospitality, transport, and health and social care, where exposure to both physical and temporal constraints is high. The analysis also shows that employers reporting poor working conditions are far more likely to face staff retention problems, confirming that adverse physical and psychosocial work environments are crucial for both recruitment and retention capacity.

These findings are in line with Bachmann and Heinze (2025) who identify factors that attract workers to specific jobs on the German labour market. They find that higher-than-average occupational wages, full-time employment, higher job satisfaction, and lower worries about job loss are all associated with a higher probability of entering and remaining in an occupation.

Job satisfaction itself is both a determinant and a consequence of occupational mobility. Using representative German survey data, the German Socio-Economic Panel (SOEP), Bachmann et al. (2025) show that job mobility is generally associated with gains in job satisfaction. Part of this improvement reflects a "catching-up effect", as job changers often report significantly lower job satisfaction in their previous jobs. The study also finds that the largest improvements in both wages and job satisfaction are observed among occupational mobility that involves a strong change in professional orientation or skill requirements. Therefore, structural change provides opportunities to improve not only workers' wages, but also their job satisfaction.

However, these gains are not equally distributed. Bachmann et al. (2025) find that on average, women experience lower overall wage growth than men. Despite broadly similar mobility patterns, the results show that among job switchers, wage gains are comparable between women and men—and in some cases even higher for women. The gender gap in wage growth therefore appears to stem primarily from women who remain in their jobs, suggesting that differences in mobility behaviour and job-switching opportunities may contribute to persistent disparities in wage progression.

6. Summary and conclusion

We provide a set of stylised facts on occupational mobility and its link to worker welfare, especially wages, in the European Union using worker-level data for the periods 2011-2014 and 2015-2018, updating and extending Bachmann et al. (2020). Naturally, given the structure of the EU-SILC data, this analysis is descriptive and makes no causal claims. Given that the job change variable, which is crucial for conducting an analysis of occupational mobility, was discontinued in EU-SILC after 2020, this is the last update using this data for the foreseeable future.

Our main results are as follows.

1) Occupational mobility in European labour markets is sizeable: in our sample of European countries, on average, 3% of workers change their occupation and 6% of workers change their job from one year to the next. Cross-country differences in both job and occupational mobility are large. Occupational mobility ranges from to 0% (Italy) to 9% (Sweden), while job mobility ranges from about 3% in Italy to over 20% in Sweden.
2) Occupational mobility differs strongly between socio-economic groups: Women are less occupationally mobile than men; younger workers are more mobile than older workers; workers with a higher education level are more mobile than workers with a lower education level; and persons with part-time contracts show higher occupational mobility than full-time employees.

3) Between the periods 2011-2014 and 2015-2018, both job and occupational mobility slightly increased.
4) The periods 2011-2014 and 2015-2018 display differences in the importance of socio-economic characteristics. These differences, e.g. between women and men and between workers with low and medium qualification levels, are smaller in the period 2015-2018 than in the period 2011-2014. Older workers display a lower probability of occupational change in the later period than in the earlier period. We also observe that occupational differences have widened in the second periods.
5) A consequence of the Great Recession can be seen in the higher share of involuntary occupation changes in all occupation changes in the period 2011-2014 compared to the period 2015-2018. Involuntary occupation changes are particularly pronounced in the earlier period in the Southern European countries most strongly hit by the Great Recession.
6) Voluntary occupational mobility is less frequent among women and older workers, while older workers also face higher risk of involuntary occupational mobility.
7) Occupational mobility is strongly linked to wage mobility. Workers who change occupation are much less likely to stay in the same decile of the wage distribution than workers who stay in their occupation.
8) Women (compared to men), and low-skilled workers (compared to medium-skilled workers) are more likely to experience a downward wage transition, and less likely to experience an upward wage transition. By contrast, high-skilled workers have a higher probability of an upward wage transition than medium-skilled workers.
9) Occupation changers have a higher probability of making an upward wage transition, but also a higher probability of making a downward wage transition, than occupation stayers. Upward wage transitions are much more likely for workers who make a voluntary occupation change, whereas downward wage transitions are much more likely for workers who make an involuntary occupation change. These results indicate that voluntariness is a key determinant of whether occupational mobility is associated with wage gains or losses.

Our results have several social and policy implications. First, the large cross-country variation in occupational mobility indicates that this margin of adjustment is much more pronounced in some countries than in others. Therefore, structural change of the labour market may be easier in some countries than in others. However, it should be pointed out that job-to-job transitions are only one of several margins of adjustment to structural change. In particular, the task profile of occupations can

change over time (Freeman et al. 2020; Bachmann et al. 2024b), which means that structural change can also occur within occupations, i.e. without mobility between occupations.

Second, the differences between socio-economic groups in occupational and wage mobility make clear that structural change through job-to-job transitions and occupational mobility is easier for some worker groups than for others. Especially women, older workers and low-skilled workers are less likely to engage in voluntary occupational mobility and to experience upward wage transitions. Therefore, these groups should be supported to avoid being left behind in the digital and green transition.

Third, the differences between time periods show that the earlier time period (dominated by the effects of the Great Recession) features larger differences between some socio-economic groups than the later time period that was marked by sustained economic growth. Therefore, more turbulent economic times of structural change are likely to exacerbate labour-market inequalities which should therefore be placed highly on the policy agenda.

Finally, analyses using country-specific data show that occupational mobility does not necessarily lead to a reduction in skills shortages. Rather, several studies show that working conditions play a crucial role in providing workers with the right incentives to move to shortage occupations and to remain there. Therefore, policies to reduce skill shortages should consider both wages and more general working conditions in shortage occupations to make them attractive for workers.

List of Tables

List of Figures

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