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New Jobs, New Joys? Monetary and Non-Monetary Returns to Occupational Mobility

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Abstract

Worker mobility plays a central role in facilitating structural change and addressing labour shortages in labour markets. This paper examines the incentives for workers to change jobs or occupations by analyzing subsequent gains in earnings and job satisfaction. We distinguish between different types of mobility based on changes in occupational content and complexity. The results reveal that job mobility is positively associated with both wage and job satisfaction gains. While this relationship holds across most forms of mobility, the largest improvements are observed for horizontal mobility, i.e. a change of occupational content at the same level of occupational complexity, and diagonal mobility, i.e. a change of both occupational content and complexity. Our findings indicate substantial heterogeneities across worker groups: while women who change jobs experience wage growth comparable to men, women who remain in their job exhibit lower wage growth. For workers with a migration background, mobility primarily yields monetary benefits, whereas increases in job satisfaction are smaller than for non-migrant workers.

JEL-Classification: J62, J31, J28

Keywords: Job mobility, occupational mobility, wage, job satisfaction, structural change

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1. Introduction

Workers in many industrialized countries are currently subject to far-reaching shocks driven by different factors, in particular technological change, i.e. digitalization and the increasing use of artificial intelligence (Acemoglu et al. 2022), the green transformation, i.e. the economy's focus on greater sustainability (Marin and Vona 2019), and changing international trade flows (Dauth et al. 2021). The size of these shocks differs between sectors and occupations. For example, professions with a high proportion of routine activities are particularly exposed to technological change (Bachmann et al. 2019; Cortes 2016). In the green transformation, occupations characterized by a high share of environmentally damaging activities but few environmentally friendly practices face particularly intense pressure to either adapt or decline (Bachmann et al. 2024).

Regardless of the underlying causes, occupational mobility is a key mechanism for adapting to structural change. This is especially the case if workers make transitions from occupations with declining labour demand to occupations with increasing labour demand. For such transitions to take place, workers need to have sufficiently strong incentives, i.e. the change from one occupation to another one must be attractive, despite potential losses occurring through the loss of specific human capital (Cortes and Gallipoli 2018). Two particular important incentives in this regard could be wage development (Bachmann et al. 2020a, Hahn et al. 2017) and job satisfaction (Cornelissen 2009).

Beyond the returns to generally switching jobs, the type of mobility also plays a crucial role in workers' occupational mobility decisions. In particular, it is useful to distinguish between horizontal and vertical occupational mobility (Cortes et al. 2024, Forsythe 2023). Horizontal mobility refers to changes between occupations that involve a shift in the types of job tasks performed and of the associated skill requirement level, e.g. moving from an occupation in the hospitality sector to an office-based role. Vertical mobility, by contrast, involves transitions within the same occupational field that are accompanied by an increase in task complexity but no fundamental change in the type of tasks performed and skills required. A typical example would be moving from an entry-level office clerk position to a more demanding administrative role in the same area. Finally, we also consider diagonal mobility, which is a combination of horizontal and vertical mobility and includes changes in the job tasks and task complexity.

This distinction matters because each mobility type entails different changes in job requirements. Horizontal mobility often requires acquiring or applying a new set of technical skills and adapting to different work tasks, whereas vertical mobility primarily reflects a progression in the complexity and level of responsibility within the same occupational domain.

Assessing both the monetary and non-monetary returns to job changes, while accounting for the different forms of mobility, is essential for understanding individuals' occupational mobility decisions. In this paper, we therefore answer the following research questions: First, what wage gains can individuals achieve through occupational mobility and which types of occupational mobility lead to the highest wage gains? Second, how does job satisfaction change with occupational mobility, and which types of occupational mobility are most beneficial with respect to job satisfaction? Third, which workers benefit most from occupational mobility in terms of wages and job satisfaction?

In this paper, we explicitly focus on voluntary job changes, as our aim is to examine employee-driven mobility decisions rather than employer-initiated transitions. Involuntary job changes, due to i.e. layoffs or plant closures, often occur under different circumstances and may lead to different outcomes in terms of wage and job satisfaction as well as long-lasting labour market consequences (Davis and Von Wachter 2011, Farber 2017, Schmieder et al. 2023). For this reason, we refrain from making any claims about the returns to involuntary job changes.

In the empirical analysis, we use the German Socio-Economic Panel (SOEP), an individual-level panel data set which includes yearly information on various socio-economic characteristics, including job characteristics such as wage and job satisfaction (Goebel et al. 2023). We analyse the period 2013 to 2019, as the most current occupational classification in our data is only available from 2013 onwards, ensuring consistency throughout the period. Our analysis ends in 2019 to avoid potential biases stemming from the COVID-19 pandemic, which began in 2020 and profoundly disrupted labour markets (Soares and Berg 2022). We use ordinary least squares (OLS) regressions to examine associations between different kinds of job changes and outcomes in wages and job satisfaction. Our analysis incorporates a broad set of individual and occupational characteristics as well as individual fixed effects to account for unobserved, time-invariant personal traits.

Our results are as follows. First, the gains from voluntary occupational mobility are substantial, with respect to both wage and job satisfaction. Accounting for a broad set of controls, we find that job changes are associated with average wage increases of approximately 4 percentage points and an average increase in job satisfaction of 1.6 points on the satisfaction scale, equivalent to an increase of 22 percent. Second, the wage gains from occupational mobility are most pronounced for horizontal mobility (change of occupational content) and diagonal mobility (change of occupational content and complexity). Third, gains in job satisfaction (controlling for wage changes) largely mirror this pattern, with the most substantial increases for horizontal

mobility. Fourth, the benefits of occupational mobility vary across socio-demographic groups: Wage gains are most pronounced among highly educated individuals employed in large firms. Women who change jobs experience wage growth comparable to that of men, whereas overall wage gains for women remain lower. For individuals with a migration background, wage gains are similar to those of non-migrants; however, their job satisfaction gains from mobility are noticeably smaller.

Our contribution to the literature is threefold. First, we build on recent work (Cortes et al. 2024, Forsythe 2023) by emphasizing the importance of distinguishing between vertical and horizontal occupational mobility. We provide descriptive evidence of substantial heterogeneity in monetary returns across different types of mobility for Germany. Second, we extend the literature by examining non-monetary returns, specifically job satisfaction, and documenting similar patterns of heterogeneity. We are the first to present descriptive evidence of varying satisfaction gains across different forms of occupational mobility. Third, we highlight important differences in returns across worker groups. While wage gains are similar across gender and migration background among job movers, women experience lower wage growth overall. Furthermore, we are the first to show that migrants who change their job report smaller job satisfaction gains despite comparable wage increases.

These patterns of unequal returns also relate to broader structural issues in the labour market—most notably, persistent gender disparities (Blau and Kahn 2017). A substantial body of research has documented that the gender wage gap widens over the lifecycle and previous scholars have examined the role of job and occupational mobility in explaining the divergent patterns between men and women. Del Bono and Vuri (2011) find that wage returns to mobility are higher for men than for women. The findings of Reshid (2019) indicate the latter holds for both job and occupation changes. Cortes et al. (2024) find that the widening gender wage gap over the life course is primarily due to men moving more quickly up the job ladder within occupations (vertical mobility) than women, rather than by differences in upward movements on the occupational ladder (horizontal mobility). By contrast, our results stress that women can improve their relative wage position in the labour market by engaging in diagonal mobility, i.e. a combination of horizontal and vertical mobility.

Regarding wage gaps of workers with migration background, the existing literature shows that migrants often downgrade their occupational position and have worse job matches upon arrival in their new host countries (Beyer 2019, Dustmann et al. 2013). Our results additionally show that migrants can increase their wages through occupational mobility which stands in contrast

to the US evidence where migrant workers' wage gaps widen over the life cycle (Cortes et al. 2024). While such gains signify an absolute improvement, we also show that migrants' wage gains are comparable to those of natives, i.e. these gains are not sufficient to close the wage gap with native workers.

Our results have important implications. First, since both wage gains and job satisfaction play a crucial role in occupational mobility, firms aiming to attract talent must address both dimensions. This is especially relevant from the perspective of employers facing skill shortages and trying to fill critical roles. Second, given that different socio-demographic groups experience varying benefits from occupational mobility, targeted measures are needed to support inclusive and effective mobility. In particular, supporting mobility among women and migrant workers offers potential to increase worker–employer matching and alleviate possible workforce bottlenecks. Especially in the context of female workers, promoting job mobility may be beneficial. Women who change jobs achieve wage growth comparable to, or even exceeding, that of men. Facilitating mobility could help improve the quality of worker–employer matches, enabling women to move into positions with higher wage growth. Encouraging women to actively explore alternative employment opportunities may therefore not only enhance their individual career prospects but also strengthen overall labour market efficiency.

The remainder of the paper is structured as follows: Section 2 introduces the data and outlines the key concepts of occupational mobility. Section 3 presents descriptive evidence on wage and job satisfaction gains following job mobility, while Section 4 extends this analysis using regression models that account for a broad set of control variables. Section 5 examines heterogeneity in returns, focusing on wage effects by gender and job satisfaction gains among individuals with a migration background. Section 6 concludes.

2. Mobility concepts and data

2.1 Measuring occupational mobility

We define occupational mobility as a change of occupation from one year to the next, based on the German classification of occupations (Klassifikation der Berufe – KldB 2010). This system characterizes occupations using a five-digit code as outlined in Table 1.

The first four digits of the KldB code refer to the task-related characteristics of an occupation, known as its occupational specialization. This reflects the skills and technical knowledge required to perform the job. Occupational specialization represents the horizontal dimension of the

classification system, as occupations differing in these digits involve distinct task requirements. As the digit level increases, so does the level of detail, allowing for a more granular differentiation between occupations. The fifth digit indicates the requirement level within a given occupational specialization, distinguishing occupations by the complexity of tasks rather than their type. It classifies the same jobs into four distinct levels: 1. Unskilled/semiskilled tasks (helpers) 2. Skilled tasks (skilled workers) 3. Complex tasks (specialists) 4. Highly complex tasks (experts) (Paulus et al. 2010). Thus, the fifth digit of the KldB does not differentiate according to task type, but according to the complexity of the task requirements within a given occupation. This dimension of occupational classification therefore represents the vertical dimension of the occupational classification.

Table 1: Classification of occupations 2010: System and examples

KldB digits	Level	Example	Number of occupations
1	Professional field	2: Raw material extraction, production and manufacturing	10
2	Main occupational group	25: Mechanical and automotive engineering professions	37
3	Occupational group	252: Vehicle, aerospace and shipbuilding technology	144
4	Occupational sub-group	2525: Professions in two-wheeler technology	700
5	Occupational category	25252: Specialist activities, e.g. bicycle mechanic	1,286

Source: Federal Employment Agency (Bundesagentur für Arbeit (2011)).

Drawing on the KldB classification system, we operationalize different kinds of occupational mobility according to the definitions outlined in Table 2. In the next section, we describe the data set used and how we empirically implement the definitions of job and occupational mobility.

Table 2: Occupational mobility concepts and definitions

Mobility Concept	Definition	KldB Code Criteria	Description
Job change	A change in the employment relationship from one year to the next.	None	General definition, basis for all mobility types. Changes are self-reported by the individual
Job change – same occupation	A job transition within the same occupation.	First 3 digits and 5th digit unchanged.	Continuing the same occupation at a different employer.
Vertical mobility	Job change with the same occupational specialization and a change in the level of task and skill requirements.	First 3 digits unchanged, 5th digit changes.	Reflects upward or downward movement in complexity/responsibility within the same specialization.
Horizontal mobility	Job change with a shift in occupational specialization but with the same level of task and skill requirements.	Change in the first 3 digits, 5th digit unchanged.	Indicates a lateral move across occupational fields with similar task complexity.
Diagonal mobility	Job change with both a change in specialization and a change in task and skill requirements.	Change in the first 3 digits and 5th digit.	Combination of horizontal and vertical mobility.

Notes: Own elaboration.

2.2 The Socio-economic Panel (SOEP)

The SOEP is a representative longitudinal survey of people living in Germany which has been used in numerous studies to analyse wages and mobility (e.g. Biewen and Juhasz 2012, Dustmann and Pereira 2008). The survey is conducted annually and includes a wide range of questions on socio-economic and household characteristics.

In order to identify job movers in the SOEP, information on the question “Have you changed jobs or started a new job since January 1 [previous year]?” is linked to information on the month of the respective interview. This makes it possible to deduce whether a job change took place between two consecutive interviews. Additionally, interviewees are asked to state their occupation which is assigned to an occupational category based on the KldB 2010 classification. By combining information on job changes with occupational codes, we are able to classify the type of occupational mobility in line with the definitions provided in Table 2.

A key challenge in measuring occupational mobility is minimizing measurement error. In survey data, such errors can arise either from inaccurate self-reporting by respondents or from misclassification of the reported occupations. In the SOEP, the information on occupations is captured in the following way: interviewees are asked an open question to provide a detailed description of their occupation; using this information, and if necessary additional information from the interview, e.g. on the required education, the interviewer identifies the fitting occupational code (Tschersich and Schütz 2017). Measurement error is therefore likely to be low. To further reduce potential measurement error, we follow the literature on occupational mobility (e.g. Kambourov and Manovskii 2008) and only measure a change of occupation if there is a job change at the same time.

To distinguish between voluntary and involuntary job changes, we rely on a follow-up question in the SOEP that asks respondents to report the reason for their job change. Job transitions attributed to employer-initiated terminations or plant closures are classified as involuntary and excluded from our estimation sample. While the number of such cases is relatively small, partly due to the overall low response rate to the follow-up question, we apply an additional restriction on our set of voluntary job changers. Specifically, we exclude individuals who experienced a break of more than six months between jobs, as extended employment gaps may signal difficulties in finding suitable re-employment. Such prolonged unemployment spells are known to lower reservation wages (Krueger and Mueller 2016, Deschacht and Vansteenkiste 2021) and could bias estimates of wage returns to voluntary job changes. Accordingly, these individuals are also removed from the analysis.

To quantify possible wage gains, we use hourly wages. As hourly wages are not directly available in the SOEP, we calculate them from information on the monthly wage and working hours: following Bachmann et al. (2022), we divide the gross monthly wage by the actual weekly working hours (including overtime), multiplied by a factor of 4.345 to obtain monthly working hours. To standardize our measure of wage gains, we compute the percentage change in the hourly wage from one year to the next using the base year as the reference point. For example, an increase in hourly wages from €10 in year t to €11 in year $t+1$ corresponds to a 10% increase, which is reflected as a 10 in our outcome variable.

The SOEP also includes a question on job satisfaction.¹ The possible answers are given on a Likert scale ranging from 0 to 10. The 0 stands for “completely dissatisfied” and 10 for “completely satisfied”. We use this variable to calculate changes in job satisfaction by taking the year-over-year difference in respondents’ reported values.

In addition to our main variables of interest, the SOEP provides rich information on individual and household characteristics, as well as data on respondents’ occupations and limited data on firms. These variables are used to further restrict the sample and serve as additional controls in our analysis. We limit our sample to individuals aged 20 to 60 who are employed in jobs subject to social security contributions. Accordingly, we exclude self-employed, marginally employed individuals, and those in special employment arrangements (e.g. job creation schemes, internships). We also exclude cases with missing or implausible information, such as unrealistically low or high working hours (e.g. part-time workers with more than 60 working hours per week or full-time workers with less than 25 working hours per week).

Having a migration background is defined with the help of a SOEP indicator that distinguishes between having a direct, indirect or no migration background. This indicator is constructed based on the respondents’ country of birth as well as their parents’ country of birth. For the purposes of our analysis, we collapse these categories into a binary variable that takes the value 1 if an individual has either a direct or indirect migration background, and 0 if no migration background is reported.

Our analysis focuses on the period from 2013 to 2019. We select 2013 as the starting point, as a consistent classification of the KldB 2010 is only available in the SOEP from this year onward. We do not consider the years of the Covid pandemic, which started in 2020, as the pandemic is

¹ The exact wording of the question is: “How satisfied are you currently with the following areas of your life? How satisfied are you... with your work?” and is only addressed to people in employment.

an exceptional time period and known to have influenced mobility, wages and satisfaction in special ways (Bachmann et al. 2023, Soares and Berg 2022). The resulting sample comprises 56,483 observations on 16,429 individuals.

3. Descriptive results

3.1 Occupational mobility

We begin by outlining the mobility patterns observed in our sample. Table 3 presents the absolute and relative frequencies of different forms of occupational mobility. Columns 1 and 2 refer to the full sample, including individuals who remain in their jobs, while column 3 focuses exclusively on those who experienced a job change.

Table 3: Frequency of different kinds of mobility

	(1) Full sample (absolute)	(2) Full sample (percent)	(3) Only Job changers (percent)
Mobility Indicators			
Job change	3,722	6.678 (24.964)	100.000 (0.000)
Job change – same occupation	1,678	2.971 (16.978)	44.846 (49.702)
Horizontal mobility	971	1.719 (12.998)	25.742 (43.727)
Diagonal mobility	834	1.477 (12.061)	22.110 (41.504)
Vertical mobility	289	0.512 (7.135)	7.662 (26.602)
Observations	56,483	56,483	3,772

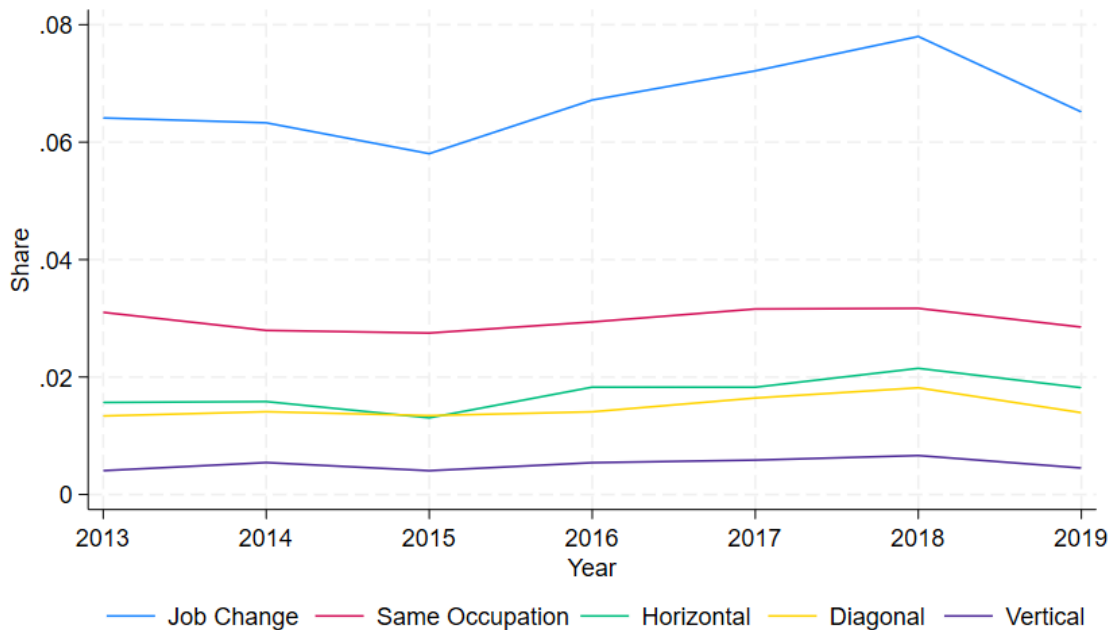
Source: SOEP, own calculations. – Note: Column 1 shows absolute frequencies of each mobility type. Column 2 reports their share of the full sample. Column 3 presents the proportion of mobility types among the 3,772 job changers. Standard deviation in parentheses.

Overall, approximately 6.7 percent of employees in our sample experience a job change between two consecutive years. These job changes can be classified by the type of occupational mobility involved. The most common form is a job change within the same occupation, accounting for about 45 percent of all job changes. Among job changes that involve a shift in occupation, horizontal mobility is the most frequent. Around 1.7 percent of the full sample, equivalent to 26 percent of all job changers, transition horizontally, meaning they change their occupational specialization but remain at the same level of task complexity. Diagonal changes, which combine a change in specialization and task complexity, are slightly less common, occurring in 1.5 percent of workers in the full sample and 22 percent of job changers. Purely vertical changes, where workers move to a different requirement level within the same specialization, are the least

common. They represent only 0.5 percent of the overall sample, or about 8 percent of all job changers.

The proportion of mobility types remains relatively stable over time. Figure 1 illustrates the yearly shares of each mobility category, corresponding to column 2 of Table 3. Overall job mobility fluctuates modestly between 6% and 8%, with a slight peak in 2018. The gradual increase in mobility from 2015 to 2018 is largely driven by small rises across all categories, with the most notable rise in horizontal mobility. In 2019, mobility declines slightly compared to the previous year. However, we refrain from interpreting this drop as a trend, given that our analysis period ends with this observation. In sum, occupational mobility in Germany followed a largely stable pattern in the years preceding the pandemic.

Figure 1: Share of occupational changes over time



Source: SOEP, own illustration. Notes: Every line represents the annual share of employees experiencing this type of occupational change between consecutive years.

Individuals that decide to change employment might be systematically different from the ones that stay at their employer. To explore these potential differences, we present means of different characteristics for the full sample and the groups of job movers and stayers in Appendix Table A1. One notable difference is age: movers are generally younger than those who remain with their employer. This pattern is mirrored in tenure, as movers typically have less time with their current employer and often work in smaller firms before leaving. Household characteristics also play a role; unmarried individuals, for example, are more likely to change jobs. Migrant workers,

too, show higher mobility. Surprisingly, we observe no significant differences in job mobility based on gender or whether there are children in the household.

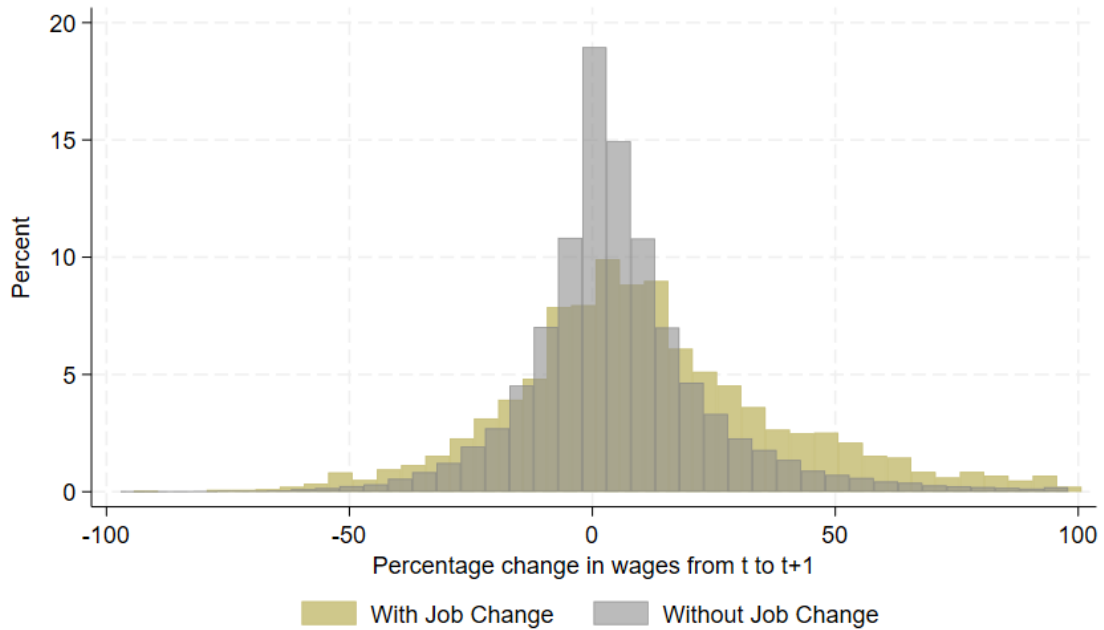
Appendix Table A1 also reveals differences in wage and job satisfaction. Job movers generally start out with lower wages and satisfaction levels than those who stay in their jobs. At the same time, movers report larger year-on-year increases in both wages and satisfaction. We explore these developments in more detail in the following sections.

3.2 Mobility and wage gains

To start, we compare the histograms of the year-over-year percentage change in hourly wages for job movers and job stayers in Figure 2. Both groups display roughly normal distributions centered around zero, indicating that for most individuals, wage changes are relatively small. However, some differences emerge: stayers exhibit a larger peak at zero, suggesting that wage stability is more common among this group. In contrast, the distribution for movers is flatter and features a more pronounced right tail, indicating that wage gains are more frequent and more substantial among job changers. A surprisingly large proportion of observations falls on the left side of the distribution. Several factors might explain this pattern. First, the figure does not account for changes in working arrangements, such as transitions from full-time to part-time employment, which typically result in lower hourly wages. Second, inaccuracies in self-reported working hours (for instance, due to recall errors about overtime) could also lead to apparent declines in wages, even when the wage rates themselves remain unchanged. Finally, some individuals might voluntarily accept jobs with lower pay if these transitions lead to improved overall job satisfaction or other non-monetary benefits.

We further break down the distribution of wage gains for job changers by distinguishing those who remain in the same occupation from those who switch to a different one. Figure A1 in the Appendix presents the corresponding histograms. The overall shapes of the two distributions are broadly similar, suggesting no substantial differences in wage dynamics between these groups. Nonetheless, the figure shows that wage changes close to zero are slightly more common for those who remain in the same occupation, implying smaller wage gains for this form of mobility.

Figure 2: Distribution of wage changes with and without a job change

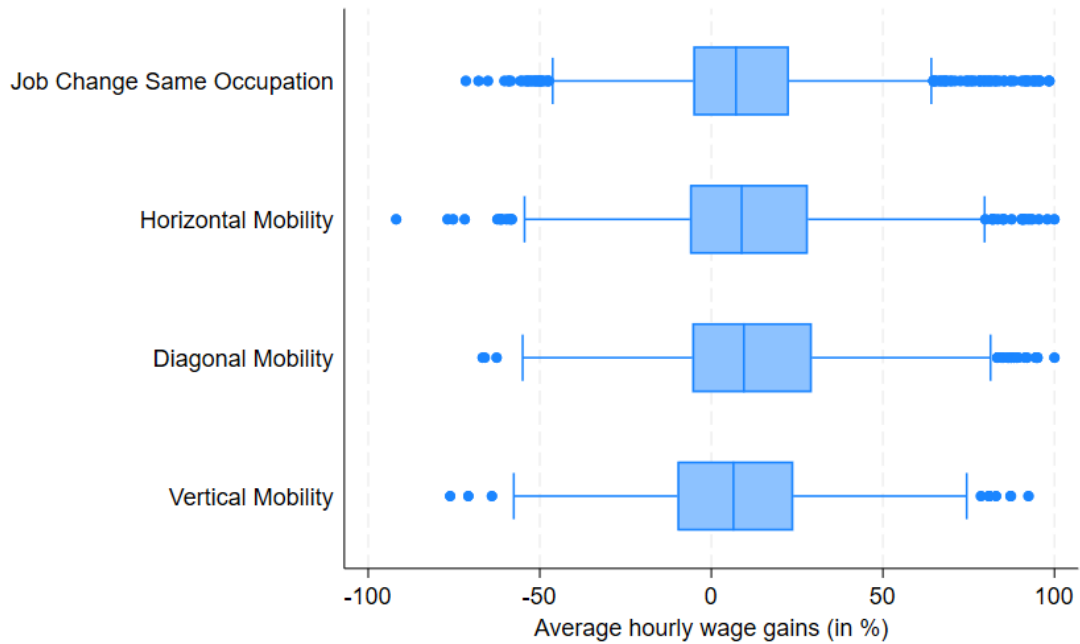


Source: SOEP, own illustration.

Given these differences, we take a closer look at the distribution of wage gains across all mobility types using boxplots in Figure 3. Each row represents a distinct form of mobility. Overall, all mobility types exhibit positive average wage gains, as indicated by median values above zero for each group. The largest median wage gain is achieved by diagonal mobility at 9.5 percent. Moreover, the figure highlights considerable variation in wage gains within each mobility type. The interquartile range – representing the middle 50% of wage changes – varies across groups, with diagonal and horizontal mobility showing the widest spreads. This suggests greater wage volatility for workers experiencing a change in their job requirement level. In contrast, job changes within the same occupation that indicate no change in requirement level have a narrower interquartile range.

The presence of extreme values is also apparent across all mobility types. Interestingly, while positive outliers are present for all mobility types, outliers are more prominent for horizontal mobility or for changes within the same occupation. This points to potentially higher risk-reward tradeoffs for these kinds of mobility, where more substantial wage gains may be achievable but are also accompanied by higher downside risks.

Figure 1: Average wage change by type of job/occupation change



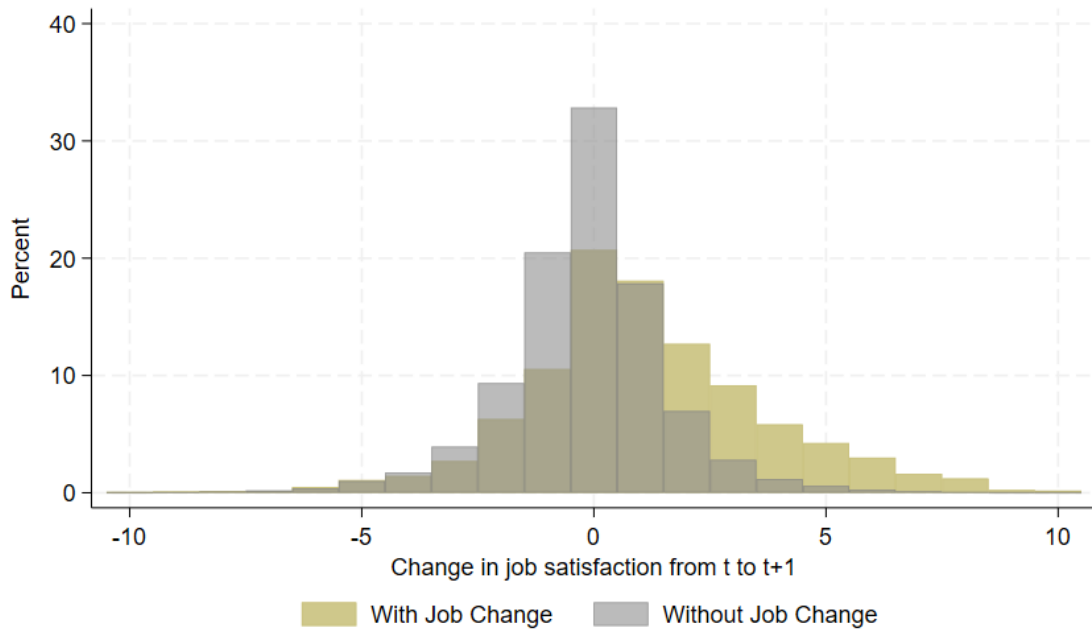
Source: SOEP, own illustration.

3.3 Mobility and job satisfaction

Beyond wages, job satisfaction can also influence the decision to search for a new job and ultimately make a career change (Cornelissen 2009). Therefore, it is important to also consider this dimension when analyzing the returns to job mobility. In the SOEP data, job satisfaction is captured on a scale from 0 (lowest satisfaction) to 10 (highest satisfaction). In our sample, the overall average job satisfaction is 7.2 points (see Appendix Table A1). The initial level of satisfaction is slightly higher for individuals who stay with their employer (7.3 points) than for individuals who change their job (6.4 points). However, this difference is offset when looking at yearly changes in satisfaction for both groups. While job stayers experience either stagnant or slightly declining satisfaction levels, job changers report an average increase of 1.1 points. This indicates that after making the transition, job satisfaction in the new job is substantially higher.

We take a closer look at the changes of job satisfaction in Figure 4 by plotting the distribution of the changes in job satisfaction for changers and stayers. Both distributions roughly follow a normal shape. However, job stayers exhibit a sharper peak around zero, indicating that around 33% of individuals experience little to no change in job satisfaction. In contrast, job changers have a larger share of observations on the right side of the distribution, suggesting that they are more likely to experience substantial improvements in job satisfaction after switching jobs.

Figure 2: Distribution of changes in job satisfaction with and without a job change

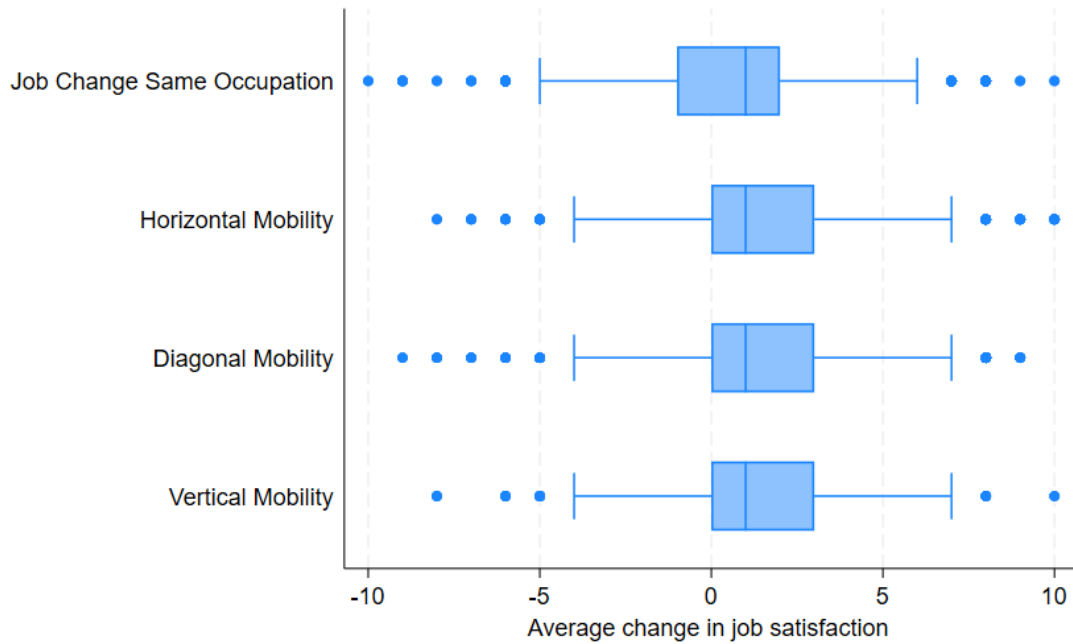


Source: SOEP, own illustration.

A similar pattern emerges when we focus exclusively on job changers and distinguish between those who remain in the same occupation and those who switch occupations. These distributions, presented in Appendix Figure A2, largely overlap and are slightly shifted to the right of zero, suggesting that most job changers experience positive gains in job satisfaction. Notably, the bars for individuals who switch occupations are slightly taller at higher levels of satisfaction gains, indicating that leaving one's occupation may lead to even greater improvements in job satisfaction.

To explore the differences across various types of mobility, Figure 5 presents separate boxplots for each mobility category. Notably, the median change in satisfaction for all types is above zero, indicating that, on average, job changers tend to see improvements in their job satisfaction. Particularly striking are the boxplots for horizontal and diagonal mobility, whose interquartile ranges lie entirely to the right of zero. This suggests that most individuals experiencing these types of mobility see positive returns in satisfaction. Similar to the wage changes observed earlier, we see several outliers in these distributions. These extreme observations often represent individuals who report extreme satisfaction values in one year and the opposite extreme the following year.

Figure 5: Average change in satisfaction by type of job/occupation change



Source: SOEP, own illustration.

4. Regressions results

So far, our descriptive analysis indicates that job mobility is generally associated with positive wage and job satisfaction gains, although these vary considerably depending on the type of mobility. However, the observed returns may be influenced by other factors that are not yet accounted for in our analysis. To address this, we proceed with ordinary least squares (OLS) regressions of wage and job satisfaction gains, incorporating an expanding set of controls to account for these potentially confounding variables. We estimate three different model specifications which differentiate between the various types of mobility and sequentially introduce additional sets of controls.

4.1 Methodology

We begin by estimating the following baseline regression model:

$$y_{it} = \beta_0 + \beta_1 \text{Change}_{it} + \theta' Z_{it} + \varepsilon_{it} \quad (1)$$

where y_{it} represents our outcome variable, either the year-on-year percentage change in hourly wages or the change on the job satisfaction scale for individual i in year t . The main variable of interest, Change_{it} , is a binary indicator equal to one if the individual experienced any form of job change and zero otherwise. The vector Z_{it} contains a baseline set of control variables, i.e. year and federal state dummies, to capture temporal and regional differences in wage dynamics.

We progressively extend this baseline model by incorporating additional vectors of control variables for individual and household characteristics (X_{it}), occupational and firm characteristics (W_{it}) and finally also individual fixed effects (μ_i) to control for any unobservable time-invariant personal characteristics². The fully extended first specification can then be summarized by:

$$y_{it} = \alpha + \beta_1 \text{Change}_{it} + \delta' X_{it} + \gamma' W_{it} + \theta' Z_{it} + \mu_i + \varepsilon_{it} \quad (2)$$

Next, we refine our main variable of interest by distinguishing between job changes that involve a change in occupation and those that do not:

$$y_{it} = \alpha + \beta_1 \text{ChangeSameOcc}_{it} + \beta_2 \text{ChangeDiffOcc}_{it} + \delta' X_{it} + \gamma' W_{it} + \theta' Z_{it} + \mu_i + \varepsilon_{it} \quad (3)$$

Here, $\text{ChangeSameOcc}_{it}$ is a binary variable that indicates a job change within the same occupation, while $\text{ChangeDiffOcc}_{it}$ captures job changes that involve any changes to the KldB code (vertical, horizontal, or diagonal).

The third and last specification distinguishes the different kinds of mobility even further by dividing the group of $\text{ChangeDiffOcc}_{it}$ into the different sub-groups vertical, horizontal or diagonal occupational mobility. Thus, the third specification reads:

$$y_{it} = \alpha + \beta_1 \text{ChangeSameOcc}_{it} + \beta_3 \text{Vertical}_{it} + \beta_4 \text{Horizontal}_{it} + \beta_5 \text{Diagonal}_{it} + \delta' X_{it} + \gamma' W_{it} + \theta' Z_{it} + \mu_i + \varepsilon_{it} \quad (4)$$

In all regression specifications, the reference group consists of individuals who remain with their current employer. Recognizing that job changers may exhibit unique characteristics not shared by job stayers, we perform additional regressions restricted to the subsample of job changers. This approach allows for a more precise estimation of the differential consequences of various forms of job mobility within this subgroup.

4.2 Wage gains: regression results

Table 4 displays the estimation results for wage gains. The table is structured by model specification across the rows, while each column introduces an additional set of control variables. In the most basic specification, which includes only a general job change indicator along with year and state fixed effects, we observe that changing jobs leads to an average year-on-year wage increase of 6.7 percentage points. As additional control variables are incorporated into the model, the magnitude of this effect diminishes, reflecting the removal of confounding factors. Nevertheless, even when accounting for the full set of controls and individual fixed effects, the

² An overview of the variables included in each vector is provided in Appendix Table A2.

wage gains associated with job changes remain positive and statistically significant, yielding a wage gain of approximately 3.9 percentage points.

Table 4: Wage gains through job and occupational mobility, results from OLS regressions

	(1)	(2)	(3)	(4)
<i>Reference group: no mobility</i>				
Specification I				
Job change	6.651*** (0.730)	5.833*** (0.725)	5.498*** (0.715)	3.868*** (0.794)
Specification II				
Job change – same occupation	5.504*** (1.047)	4.631*** (1.047)	4.259*** (1.029)	3.639*** (1.108)
Job change – different occupation	7.587*** (0.995)	6.809*** (0.985)	6.506*** (0.973)	4.058*** (1.070)
Specification III				
Job change – same occupation	5.503*** (1.048)	4.626*** (1.047)	4.254*** (1.029)	3.571*** (1.111)
Horizontal mobility	8.235*** (1.313)	7.468*** (1.301)	7.137*** (1.269)	4.411*** (1.421)
Vertical mobility	0.508 (2.142)	-0.369 (2.128)	-0.577 (2.104)	-3.225 (2.298)
Diagonal mobility	9.305*** (1.796)	8.547*** (1.773)	8.242*** (1.759)	6.424*** (1.801)
Individual and household characteristics	-	X	X	X
Occupational and firm characteristics	-	-	X	X
Individual fixed effects	-	-	-	X
Year fixed effects	X	X	X	X
Federal state fixed effects	X	X	X	X
Observations	56,483	56,483	56,483	56,483

Source: SOEP, own calculations. – Note: See Table A3 for the full set of control variables included. Robust standard errors clustered at the individual level in parentheses. * p<0.10, ** p<0.05, *** p<0.01.

In the second specification, the job change indicator is further divided into moves within the same occupation and those involving a change of occupation. Across all specifications, the wage gains for job movers remain positive and highly significant, although the magnitude again declines with the inclusion of additional controls. Notably, this specification reveals a degree of heterogeneity in wage returns to mobility: job changes involving a shift to a different occupation are associated with slightly higher wage gains (6.5 percentage points in column 3) compared to moves that occur within the same occupation (4.3 percentage points). Therefore, despite the potential loss of occupation-specific human capital when changing occupations, workers are able to realize greater wage increases when moving to a different occupation.

This differentiation becomes even more pronounced in the most detailed Specification III. Here, the most substantial wage gains are observed for diagonal mobility, with an increase of 6.4

percentage points in the fixed effects specification. Vertical mobility also exhibits notable wage gains, albeit slightly lower, at 4.4 percentage points. Surprisingly, forms of mobility that are conceptually closer to the initial job, such as vertical mobility or within-occupation changes are associated with somewhat smaller or even insignificant wage gains. This pattern suggests that workers may benefit from exploring new roles outside of their original field, indicating a substantial degree of skill transferability across occupations. These results align with the work of Gathmann and Schönberg (2008) who document the importance of skill transferability.

Given that the coefficients of the control variables might yield further insights, we also examine the complete set of regression results presented in Appendix Table A3. We primarily focus on Specification III and columns (2) and (3) as they provide the most detailed differentiation of mobility and the richest set of control variables.³ The majority of estimated coefficients align with expectations from the literature. Younger individuals experience higher wage growth, as do highly educated workers in high-skill specialist or expert occupations. Employment in large firms is also linked to higher wage growth. Conversely, the initial wage level is negatively associated with subsequent wage growth, which is intuitive: starting at a higher baseline makes further increases more challenging.

Working part-time is negatively related to wage growth. This finding is particularly interesting when examining gender differences. In the specification that includes only individual and household characteristics (column 2 of Table A3), no significant differences in wage growth are observed between men and women. However, once occupational characteristics are added, women show slightly lower wage growth, by about -0.99 percentage points. This might be driven by different mobility patterns or decisions. We will explore this heterogeneity in greater detail in Section 5.

Finally, to mitigate concerns regarding potential selection bias, since individuals who opt for job changes may systematically differ from those who remain with their current employer, we limit our analysis to a subsample comprising only job changers. Appendix Table A4 presents the results of Specification III estimated on the job-changer subsample. Although this substantially reduces the available sample size, it ensures a more internally consistent comparison. In this restricted analysis, the reference category consists of individuals who changed jobs but remained within the same occupation. In addition to the previously considered controls, we augment the set of

³ We avoid using individual fixed effects in this regression because many variables of interest (e.g. female, migration background, education) are typically time-invariant and would be excluded from the analysis.

occupational characteristics in W_{it} to include not only attributes of the initial occupation but also those of the target job. Similar control variables would not have been useful for the previous sample, since more than 90% of all individuals remain in the same job and therefore, for these observations, the characteristics of the target occupation are identical to those of the initial occupation.

In contrast to previous specifications, incorporating a comprehensive set of controls leads to an increase in the estimated coefficients for mobility for the job changers sample. This suggests that, once confounding factors are accounted for, the different forms of mobility are indeed associated with significant wage gains. Consistent with earlier findings, horizontal and diagonal mobility are linked to particularly large wage increases, while vertical mobility is associated with smaller gains relative to the reference group of within-occupation changers. So even within the subgroup of individuals that change jobs, moving to a more distant occupation appears to yield the highest wage gains.

Turning to the other socio-economic characteristics, the results generally align with the previous findings. Education remains positively associated with wage growth among job changers (columns 2 and 3), while part-time employment continues to be negatively correlated. Once we include target job characteristics in the regressions, previously significant initial job characteristics lose significance. Moving to a very large firm or to a specialist occupation are associated with the highest wage gains. This indicates that target job characteristics are generally more important for wage growth than initial job characteristics. Finally, gender no longer shows a significant association with wage growth among the sample of job changers.

Taken together, these findings underscore the general positive relationship between job and occupational mobility and wage growth, even after accounting for an extensive set of control variables. The magnitude of wage gains varies across different forms of mobility. Notably, transitions to jobs that differ substantially in requirement level from the original occupation are associated with the largest coefficients, a pattern that persists even when focusing exclusively on the sample of job changers.

4.3 Job satisfaction gains: regression results

We now turn to the outcome of job satisfaction and proceed as in the preceding section. The coefficients in this section reflect year-on-year changes in reported job satisfaction scores. Table 5 summarizes the results across the three different specifications, each incorporating progressively richer sets of control variables.

Table 5: Job satisfaction gains, entire sample: Results from OLS regressions

	(1)	(2)	(3)	(4)
<i>Reference group: no mobility</i>				
Specification I				
Job change	1.299*** (0.069)	1.352*** (0.070)	1.345*** (0.070)	1.609*** (0.093)
Specification II				
Job change – same occupation	1.051*** (0.100)	1.107*** (0.100)	1.106*** (0.100)	1.423*** (0.139)
Job change – different occupation	1.502*** (0.092)	1.551*** (0.092)	1.540*** (0.092)	1.762*** (0.119)
Specification III				
Job change – same occupation	1.051*** (0.100)	1.107*** (0.100)	1.106*** (0.100)	1.423*** (0.139)
Horizontal mobility	1.603*** (0.122)	1.651*** (0.122)	1.638*** (0.121)	1.843*** (0.155)
Vertical mobility	1.269*** (0.266)	1.323*** (0.264)	1.344*** (0.266)	1.627*** (0.348)
Diagonal mobility	1.470*** (0.149)	1.519*** (0.149)	1.499*** (0.149)	1.722*** (0.187)
Individual and household characteristics	-	X	X	X
Occupational and firm characteristics	-	-	X	X
Individual fixed effects	-	-	-	X
Year fixed effects	X	X	X	X
Federal state fixed effects	X	X	X	X
Observations	56,483	56,483	56,483	56,483

Source: SOEP, Author's calculations. – Note: See Tables A5 for the full set of control variables included. Robust standard errors clustered at the individual level in parentheses. * p<0.10, ** p<0.05, *** p<0.01.

The analysis reveals that job mobility is generally associated with statistically significant and positive changes in job satisfaction. In the specification including all fixed effects (column 4), job changers experience an average increase of 1.6 points on the satisfaction scale, which is a sizeable increase given the average job satisfaction level of 7.2 (refer to Appendix Table A1). The addition of control variables consistently increases the estimated coefficient size suggesting negative bias of confounding variables, if they are not controlled for.

Looking at the distinction between job changers who remain within the same occupation and those who move to a different occupation shows a similar pattern as seen with the wage outcomes. Specifically, job changes to different occupations are associated with larger increases in job satisfaction than job changes within the same occupation. This suggests that shifting to new tasks and responsibilities not only yields higher wage gains but also leads to improved job satisfaction.

A further disaggregation of job mobility into distinct categories mirrors these findings. While all forms of job mobility are linked to positive changes in job satisfaction, the largest improvements are observed for horizontal and diagonal mobility. In fact, horizontal mobility exhibits the most substantial job satisfaction increase, at 1.8 points on the satisfaction scale, surpassing even the gains from diagonal mobility. In contrast, the smallest increases are found among individuals who change employers but remain in the same occupation.

Turning to the other covariates reported in Appendix Table A5, there is a general absence of significant relationships with changes in job satisfaction with a few exceptions: while younger workers report slight year-on-year declines in satisfaction, longer job tenure appears to be positively associated with higher job satisfaction. The latter finding is intuitive, as longer tenure may reflect a better employer-employee match and thus greater job satisfaction.

To account for the possibility that higher job satisfaction may simply reflect increased pay at the new job, we include both the percentage change in wages and the current gross monthly income as additional controls in column (2) of Appendix Table A5. Both variables show a positive and statistically significant association with changes in job satisfaction, indicating that pay improvements contribute to higher satisfaction levels. However, the effect size of the wage change remains relatively modest compared to the coefficients associated with the different types of mobility.

To account for the specific characteristics of job movers, we once again restrict the analysis to the subsample of individuals who changed jobs. The corresponding coefficients are reported in Appendix Table A6. Consistent with the previous results, horizontal and diagonal mobility exhibit the largest coefficients, indicating the greatest job satisfaction gains for these types of transitions. In contrast, vertical mobility does not differ significantly from within-occupation job changes.

Regarding the control variables, the results for the subsample of job changers largely mirror the earlier findings, with most coefficients remaining insignificant while the positive association between satisfaction gains and wage increases becomes more pronounced in magnitude. However, one notable exception emerges: across all three model specifications in Table A6, job changers with a migration background experience significantly lower satisfaction gains. This suggests that the utility derived from a job change is smaller for individuals with a migration background compared to those without. This is another dimension of heterogeneity that will be analyzed in more depth in Section 5.

Overall, the results indicate that job mobility is generally associated with higher job satisfaction. Although all types of moves tend to have a positive relation, the magnitude of these gains differs across mobility types. Similar to the wage outcomes, transitions into jobs involving a different set of task requirements are linked to greater satisfaction gains than moves within similar task structures. The limited significance of most socio-economic control variables—aside from a few exceptions—suggests that unobserved characteristics may play a more substantial role in shaping job satisfaction outcomes.

5. Heterogeneity in mobility returns

The previous results point to two notable sources of heterogeneity that merit closer investigation. First, the returns to occupational mobility appear to differ systematically between men and women, suggesting that gender may shape both the opportunities and outcomes associated with job changes. Second, the results on job satisfaction indicate that migrants experience smaller gains from job changes than non-migrants even though wage returns were similar for both groups.

5.1 Gender differences in returns to occupational mobility

An interesting finding from column (3) of Table A3 was that women report lower wage growth than men. However, this difference disappears when restricting the analysis to the subsample of job movers (see Appendix Table A4). One potential explanation for this pattern could lie in gender-specific mobility behaviors. To explore this hypothesis, we estimate regression models in which different types of mobility serve as the dependent variables, and the key explanatory variable is a female dummy⁴. This approach allows us to examine whether men and women differ systematically in the likelihood of engaging in certain forms of occupational mobility. The results of this regression are reported in Table 6.

With regard to overall job changes (column 1), no significant differences emerge between men and women. This pattern also holds for most other types of mobility, with one notable exception: women exhibit a significantly higher likelihood of changing jobs within the same occupation. Given that the overall incidence of this form of mobility is approximately 3 percent (see Table 3), the estimated effect is quantitatively meaningful. Notably, this form of mobility, alongside

⁴ We do not include individual fixed effects in this specification, as doing so would absorb the female dummy, which is our main coefficient of interest.

horizontal moves, was previously found to be associated with smaller wage returns than vertical or diagonal mobility.

Table 6: Gender differences in mobility behaviour, entire sample: Results from OLS regressions

	(1) Job Change	(2) Job Change – Same Oc- cupation	(3) Horizontal Mobility	(4) Vertical Mobility	(5) Diagonal Mobility
Female	0.004 (0.005)	0.008** (0.004)	-0.003 (0.002)	-0.000 (0.002)	-0.001 (0.002)
Individual and household characteristics	X	X	X	X	X
Occupational and firm characteristics	X	X	X	X	X
Year fixed effects	X	X	X	X	X
Federal state fixed effects	X	X	X	X	X
Observations	56,483	56,483	56,483	56,483	56,483
R2	0.04	0.02	0.01	0.01	0.01

Source: SOEP, own calculations. – Note: Results for female dummy from different regressions with mobility indicators as dependent variables. Robust standard errors clustered at the individual level in parentheses * p<0.10, ** p<0.05, *** p<0.01.

To examine whether these differences in mobility behavior translate into different returns, we re-estimate Specification III from Table 4 (column 3), this time including interaction terms between the female dummy and the various types of mobility indicators. The results of these regressions show that most mobility coefficients remain statistically significant and broadly consistent in magnitude with the previous estimates (Table 7). The interaction terms between the female dummy and the different mobility types are generally negative but statistically insignificant, indicating no systematic gender differences in wage returns across most forms of mobility.⁵ The only exception is diagonal mobility, for which the interaction term is positive and significant at the 5% level. This suggests that women who undertake diagonal job moves experience, on average, larger wage gains than their male counterparts. Moreover, the inclusion of this interaction term substantially reduces the coefficient of the main diagonal mobility variable, implying that the previously observed high returns to this type of mobility were largely driven by female movers.

⁵ Some of the underlying cell sizes are relatively small, which may introduce statistical noise and limit the precision of the estimated interaction effects.

Table 7: Gender differences in wage changes, entire sample: Results from regressions including female interactions

	(1)
Female	-1.007*** (0.264)
<i>Reference group: no mobility</i>	
Mobility Indicators	
Job change – same occupation	5.371*** (1.555)
Job change – same occupation x Female	-2.066 (2.068)
Horizontal mobility	8.181*** (1.721)
Horizontal mobility x Female	-2.394 (2.549)
Vertical mobility	-1.336 (3.266)
Vertical mobility x Female	1.601 (4.142)
Diagonal mobility	4.690** (2.103)
Diagonal mobility x Female	7.724** (3.434)
Individual and household characteristics	X
Occupational and firm characteristics	X
Year fixed effects	X
Federal state fixed effects	X
Observations	56,483
R2	0.04

Source: SOEP, Author's calculations. – Note: Robust standard errors clustered at the individual level in parentheses
* p<0.10, ** p<0.05, *** p<0.01.

However, the main female dummy remains negative and statistically significant at the 1% level, indicating that women experience lower overall wage growth. Since wage returns to mobility do not differ substantially between men and women, a plausible explanation is that the observed gender gap is primarily driven by differences among non-movers. Indeed, when restricting the analysis to job movers only (see Appendix Table A4), no significant gender differences are found. This suggests that women who change jobs achieve wage gains comparable to those of men. Nevertheless, this pattern only applies to a subset of women; those who remain in their current job generally exhibit lower wage growth than their male counterparts.

Another relevant factor in this context is part-time employment. Women are more likely to work part-time (Bachmann et al. 2020b), and such positions typically offer lower wage growth (Manning and Petrongolo 2008). Indeed part-time work is much more important for women than for men in our sample. To account for this, we include a control for part-time status in all specifications that involve work characteristics. The corresponding coefficient is negative and statistically significant in all models, confirming the expected lower wage growth associated with part-time employment and ensuring that this component is properly controlled for in our analysis.

In terms of job satisfaction, there are no significant gender differences at all, indicating that the returns to occupational mobility differ between men and women only in the monetary dimension.

5.2 Mobility returns for individuals with a migration background

In comparison to the gender differences, the results for individuals with a migration background point to an opposite pattern. While the analysis based on the full sample shows no significant differences between individuals with and without migration background (see Appendix Tables A3 and A5), a clear divergence emerges within the subsample of job changers. In particular, there is some evidence that individuals with a migration background experience higher wage gains than natives (Appendix Table A4), but their increases in job satisfaction in addition to wage gains are consistently smaller (Appendix Table A6). This finding may indicate differing motives for job changes or variations in the perceived returns from mobility. To explore this further, we replicate the gender-based analysis, focusing this time on job satisfaction outcomes and including migration background as the key explanatory variable.

To test differences in mobility patterns, we regress the different mobility types on our set of controls. The results are reported in Table 8. Generally, mobility patterns are very similar for individuals with and without a migration background. The only significant difference arises in the case of vertical mobility, where individuals with a migration background are slightly less likely to experience such moves. However, since vertical mobility is the rarest form of job change in the sample and the corresponding subgroup is relatively small, this result should be interpreted with caution.

Table 8: Mobility patterns for individuals with migration background

	(1) Job Change	(2) Job Change – Same Oc- cupation	(3) Horizontal Mobility	(4) Vertical Mobility	(5) Diagonal Mobility
Migration Background	-0.003 (0.005)	-0.002 (0.004)	0.004 (0.003)	-0.003*** (0.001)	-0.001 (0.003)
Individual and household characteristics	X	X	X	X	X
Occupational and firm characteristics	X	X	X	X	X
Year fixed effects	X	X	X	X	X
Federal state fixed effects	X	X	X	X	X
Observations	56,483	56,483	56,483	56,483	56,483
R2	0.04	0.02	0.01	0.01	0.01

Source: SOEP, own calculations. – Note: Results for migration background dummy from different regressions with mobility indicators as dependent variables. Robust standard errors clustered at the individual level in parentheses
 * p<0.10, ** p<0.05, *** p<0.01.

We next turn to job satisfaction as the outcome variable and interact the different types of mobility with the migration background dummy. The resulting coefficients are presented in Table 9. Most of the interaction terms, as well as the main migration background dummy, are statistically insignificant, which may, however, partly be due to small cell sizes. The only exception is the interaction for horizontal mobility: individuals with a migration background experience, on average, a 0.65-point smaller increase in job satisfaction when making this type of move than their non-migrant peers. When contrasted with the wage results for this kind of mobility, which show no significant differences between the two groups, a potential explanation might be that migrants may place greater emphasis on the monetary aspects of job changes, while non-monetary factors such as job satisfaction play a comparatively smaller role in their decision-making. In this sense, migrants might prioritize financial stability or wage improvements when changing jobs, potentially viewing such moves more as economic opportunities than as a means of improving overall job quality or satisfaction.

Table 9: Differences in job satisfaction changes by migration background, entire sample: Results from regressions including interactions with migration background dummy

	(1)
Migration Background	0.016 (0.026)
<i>Reference group: no mobility</i>	
Mobility Indicators	
Job change – same occupation	1.175*** (0.117)
Job change – same occupation x Migration Background	-0.239 (0.215)
Horizontal mobility	1.840*** (0.143)
Horizontal mobility x Migration Background	-0.646** (0.263)
Vertical mobility	1.395*** (0.304)
Vertical mobility x Migration Background	-0.349 (0.488)
Diagonal mobility	1.634*** (0.177)
Diagonal mobility x Migration Background	-0.401 (0.315)
Individual and household characteristics	X
Occupational and firm characteristics	X
Year fixed effects	X
Federal state fixed effects	X
Observations	56,483
R2	0.04

Source: SOEP, own calculations. – Note: Robust standard errors clustered at the individual level in parentheses
* p<0.10, ** p<0.05, *** p<0.01.

6. Conclusion

Structural change driven by digitalization and decarbonization is reshaping labour markets and leading to shifts in employment across occupations. These transitions can facilitate the reallocation of labour toward areas of rising demand, thereby supporting economic adaptation and productivity growth. However, occupational mobility also entails potential adjustment costs, such as the need to acquire new skills or adapt to different work environments. Occupational changes can therefore only be reconciled with the needs of employees if they have positive effects on employees.

We therefore examine voluntary job and occupation changes focusing on two key aspects: wage changes and changes in job satisfaction. Our findings show that job and occupational changes

provide workers with significant opportunities for wage growth, indicating that mobility can serve as an important mechanism for career advancement. In quantitative terms, job changes are associated with average wage increases of around 3.6 percentage points, while occupational changes yield gains of up to 4.1 percentage points compared to workers who remain in their current positions. Diagonal and horizontal transitions are associated with the largest wage gains, whereas vertical changes and job changes within the same occupation still produce positive, though comparatively smaller, returns. Overall, the results on wage outcomes suggest that more substantial changes to the skill requirement level tend to yield the highest economic returns.

Beyond wage outcomes, we also examine changes in job satisfaction. Our results indicate that job mobility is generally associated with gains in job satisfaction. This can partly be explained by the fact that job movers tend to report significantly lower satisfaction levels in their previous positions than non-movers. Consistent with the findings on wage outcomes, the largest improvements in job satisfaction are observed among horizontal and diagonal occupational movers, suggesting that transitions involving a change in professional orientation or skill requirements are linked to particularly strong increases in job satisfaction. Other individual, firm-level, and occupational characteristics appear to play only a limited role in explaining changes in job satisfaction.

Wage and job satisfaction gains are not evenly distributed across worker groups. Women, on average, experience lower overall wage growth than men. Despite broadly similar mobility patterns, the results show that among job switchers, wage gains are comparable across genders—and in some cases, such as for diagonal mobility, 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 behavior and job-switching opportunities may contribute to persistent disparities in wage progression.

In terms of job satisfaction, individuals with a migration background exhibit smaller gains than native workers, despite achieving similar wage returns. This pattern may indicate that migrants place relatively greater emphasis on monetary improvements or face constraints that limit the extent to which job changes translate into higher satisfaction.

Overall, the results highlight that job and occupational mobility can serve as an important mechanism for both individual advancement and labour market adaptation. Workers who change jobs or occupations tend to achieve higher wages and greater job satisfaction, particularly when mobility involves a shift in professional orientation, as in diagonal or horizontal transitions. These forms of mobility thus not only offer substantial individual returns but also support the reallocation of labour necessary for structural transformation. Encouraging conditions that facilitate such

transitions – through targeted skill development, career support, and inclusive workplace practices – may therefore be key to ensuring that ongoing structural change benefits both employers and employees alike.

Declaration of generative AI and AI-assisted technologies in the manuscript preparation process.

During the preparation of this work the authors used GPT 5 and GPT 4o in order to improve language and readability. After using this tool, the authors reviewed and edited the content as needed and take full responsibility for the content of the published article.

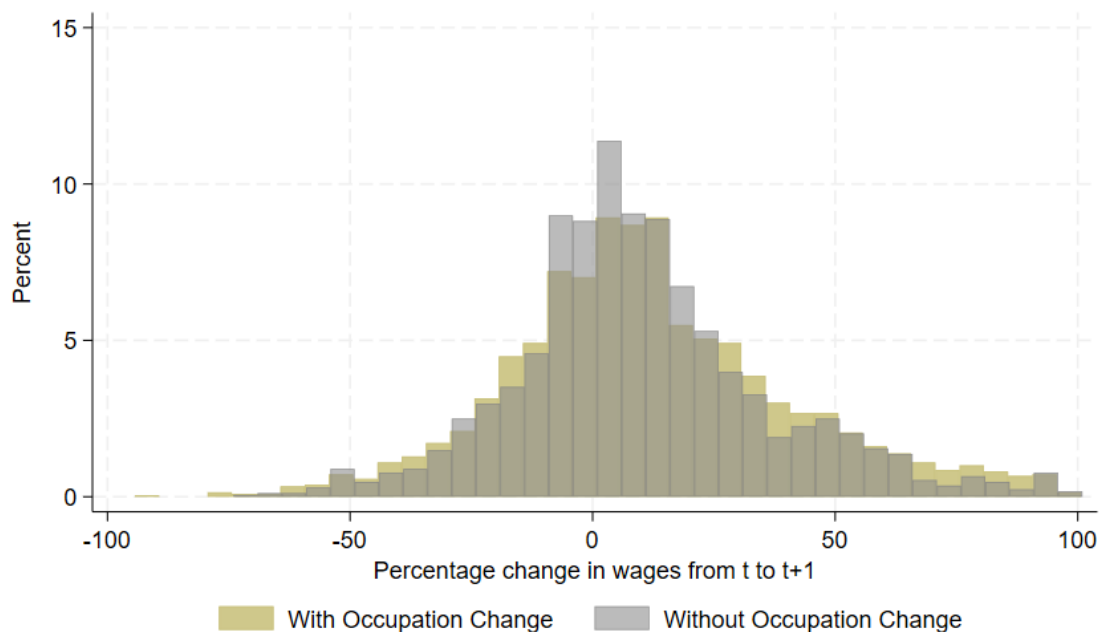
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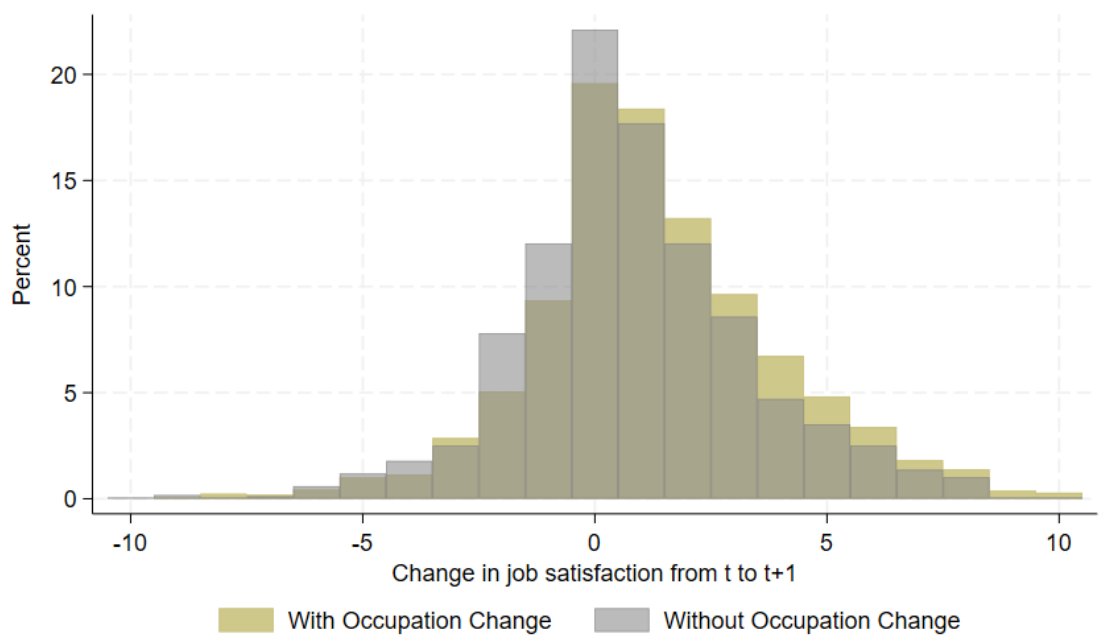
Appendix A: Figures and Tables

Figure A1: Distribution of wage changes with and without a change of occupation



Source: SOEP, own illustration. - Note: The sample is restricted to individuals that reported a job change. Occupation change requires an additional change in the KIdB code following the job change.

Figure A2: Distribution of changes in job satisfaction with and without a change of occupation



Source: SOEP, own illustration. – Note: The sample is restricted to individuals that reported a job change. Occupation change requires an additional change in the KIdB code following the job change.

Table A1: Sample description

	(1) All	(2) With job change	(3) Without job change
Current gross monthly wage	3077.995 (1996.272)	2811.571 (1867.959)	3097.061 (2003.799)
Hourly wage	18.034 (8.625)	16.381 (8.566)	18.152 (8.617)
Percentage change in hourly wage	5.516 (20.278)	11.058 (28.152)	5.120 (19.534)
Weekly working hours	38.465 (9.975)	38.701 (10.538)	38.448 (9.934)
East Germany (in %)	22.476 (41.743)	23.489 (42.399)	22.403 (41.695)
Age groups (in %)			
20 – 34	19.085 (39.298)	38.415 (48.646)	17.702 (38.169)
35 – 49	49.893 (50.000)	46.368 (49.875)	50.145 (50.000)
50 – 60	31.022 (46.259)	15.217 (35.924)	32.153 (46.707)
Female (in %)	49.580 (49.999)	51.511 (49.984)	49.441 (49.997)
Migration background (in %)	23.035 (42.106)	26.988 (44.396)	22.752 (41.924)
Education (in %)			
No professional qualification	8.109 (27.297)	8.987 (28.604)	8.046 (27.200)
Professional training	62.174 (48.496)	57.317 (49.468)	62.522 (48.407)
University or college	29.717 (45.702)	33.696 (47.273)	29.432 (45.574)
Married (in %)	65.873 (47.414)	55.329 (49.722)	66.627 (47.155)
Children in household	52.448 (49.940)	51.909 (49.970)	52.486 (49.939)
Job satisfaction	7.223 (1.870)	6.440 (2.242)	7.279 (1.828)
Change in satisfaction	-0.085 (1.845)	1.096 (2.629)	-0.170 (1.745)
Full-time (in %)	71.924 (44.937)	72.296 (44.760)	71.898 (44.950)
Part-time (in %)	28.076 (44.937)	27.704 (44.760)	28.102 (44.950)
Tenure at current Employer (in years)	11.199 (9.761)	5.924 (6.900)	11.576 (9.826)
Skill level in the current occupation (in %)			
Helper	8.441 (27.801)	9.199 (28.906)	8.387 (27.720)
Skilled worker	51.483 (49.978)	49.576 (50.005)	51.619 (49.974)
Specialist	16.435 (37.060)	16.543 (37.162)	16.427 (37.053)
Expert	23.641 (42.488)	24.682 (43.122)	23.566 (42.442)

Table A1: continued

	(1) All	(2) With job change	(3) Without job change
Company size (in %)			
< 20	17.951 (38.378)	21.262 (40.921)	17.714 (38.179)
20 – <200	26.810 (44.297)	27.519 (44.667)	26.759 (44.271)
200 – <2000	23.715 (42.534)	23.595 (42.465)	23.724 (42.539)
>2000	31.525 (46.462)	27.625 (44.720)	31.804 (46.572)
Job classification (KldB 2010 1 digit; in %)			
Occupations in agriculture, forestry, farming, and gardening	1.188 (10.835)	1.220 (10.977)	1.186 (10.824)
Occupations in production of raw materials and goods, and manufac- turing	18.970 (39.207)	15.801 (36.480)	19.197 (39.385)
Occupations in construction, archi- tecture, surveying and technical building services	4.963 (21.717)	4.401 (20.514)	5.003 (21.800)
Occupations in natural sciences, ge- ography and informatics	5.665 (23.118)	5.992 (23.736)	5.642 (23.073)
Occupations in traffic, logistics, safety and security	12.152 (32.674)	12.646 (33.241)	12.117 (32.633)
Occupations in commercial ser- vices, trading, sales, the hotel busi- ness and tourism	10.300 (30.397)	13.415 (34.085)	10.078 (30.103)
Occupations in business organiza- tion, accounting, law and admin- istration	21.268 (40.921)	17.312 (37.840)	21.551 (41.118)
Occupations in health care, the so- cial sector, teaching and education	22.789 (41.948)	26.140 (43.946)	22.549 (41.791)
Occupations in philology, literature, hu- manities, social sciences, economics, media, art, culture, and design	2.703 (16.219)	3.075 (17.267)	2.677 (16.141)
Observations	56,483	3,772	52,711

Source: SOEP, own calculation. - - Notes: The table displays mean values of the variables. Standard deviations are shown in parentheses.

Table A2: Description of Control Vectors

Control Vector	Description	Variables
Z_{it}	Baseline set of controls	Year & federal state dummies
X_{it}	Individual and Household characteristics	Female, age groups, migration background, East Germany dummy, education groups, married, children in household dummy
W_{it}	Occupational and firm characteristics	Initial gross monthly wage, tenure at the current employer, firm size, skill level at the current job
μ_i	Individual fixed effects	Individual dummies

Notes: List of control variables used in the regressions.

Table A3: Wage gains, entire sample: Full regression results

	(1)	(2)
Mobility Indicators (Reference: No Job Change)		
Job Change – same occupation	4.626*** (1.047)	4.254*** (1.029)
Horizontal mobility	7.468*** (1.301)	7.137*** (1.269)
Vertical mobility	-0.369 (2.128)	-0.577 (2.104)
Diagonal mobility	8.547*** (1.773)	8.242*** (1.759)
Individual and Household characteristics		
Female	0.079 (0.205)	-0.990*** (0.261)
Age (Reference: 35-49)		
20-34	2.180*** (0.315)	1.058*** (0.333)
50-60	-0.718*** (0.249)	-0.289 (0.268)
Migration background	0.438 (0.300)	0.048 (0.330)
East Germany	-0.001 (0.695)	-1.399* (0.718)
Education (Reference: professional training)		
No professional qualifications	-0.193 (0.430)	-0.861* (0.449)
University or college degree	0.543** (0.218)	2.209*** (0.317)
Married	-0.488** (0.245)	-0.021 (0.248)
Children in the household	0.134 (0.251)	0.334 (0.268)
Occupational and Firm Characteristics		
Current gross monthly salary		-0.002*** (0.000)
Part-time		-3.237*** (0.432)
Tenure at the current employer (in years)		-0.001 (0.013)
Company Size (Reference: 20 - < 200)		
<20		-0.467 (0.380)
200 - < 2000		0.534 (0.328)
> 2000		1.625*** (0.320)
Skill level in the initial occupation (Reference: Skilled Worker)		
Helper		-0.431 (0.495)
Specialist		1.242*** (0.337)
Expert		2.683*** (0.408)
Year fixed effects	X	X
Federal state fixed effects	X	X
Observations	56,483	56,483
R2	0.013	0.036

Source: SOEP, own calculations. – Note: Robust standard errors in parentheses clustered at the individual level.

* p<0.10, ** p<0.05, *** p<0.01.

Table A4: Wage gains, sub-sample of job movers: Full regression results

	(1)	(2)	(3)
Mobility Indicators (Reference: Job Change – same occupation)			
Horizontal mobility	2.916* (1.631)	3.055** (1.547)	3.233** (1.560)
Vertical mobility	-4.861** (2.247)	-4.304* (2.261)	-5.210** (2.314)
Diagonal mobility	4.183** (2.008)	4.606** (1.977)	4.349** (1.965)
Individual and Household characteristics			
Female	0.031 (1.376)	-1.412 (1.457)	-1.454 (1.498)
Age (Reference: 35-49)			
20-34	2.525 (1.599)	-1.057 (1.583)	-1.568 (1.583)
50-60	0.504 (1.984)	1.369 (1.931)	2.110 (1.943)
Migration background	3.977** (1.919)	2.491 (1.972)	3.023 (1.970)
East Germany	2.065 (5.353)	-1.391 (5.590)	-0.873 (5.532)
Education (Reference: professional training)			
No professional qualifications	-7.551** (2.974)	-7.552** (2.957)	-6.852** (2.962)
University or college degree	1.083 (1.450)	5.163*** (1.904)	4.063** (1.969)
Married	-4.118** (1.615)	-2.254 (1.521)	-2.320 (1.525)
Children in the household	0.691 (1.466)	1.390 (1.454)	1.578 (1.442)
Occupational and Firm Characteristics			
Current gross monthly salary		-0.005*** (0.001)	-0.006*** (0.001)
Part-time		-10.093*** (2.320)	-9.928*** (2.424)
Tenure at the current employer (in years)		-0.166* (0.085)	-0.201** (0.084)
Company Size (Reference: 20 - < 200)			
<20		0.749 (1.901)	1.756 (1.961)
200 - < 2000		1.677 (1.778)	1.140 (1.752)
> 2000		2.531 (2.043)	0.111 (2.117)
Skill level in the initial occupation (Reference: Skilled Worker)			
Helper		-4.641 (2.933)	-2.877 (3.160)
Specialist		3.207 (2.254)	1.135 (2.428)
Expert		3.793 (2.350)	2.242 (2.652)

Table A4: continued

	(1)	(2)	(3)
Target Occupational and Firm Characteristics			
Fulltime to Parttime			0.398 (3.703)
Skill level in the target occupation (Reference: Skilled Worker)			
Helper			-3.637 (2.945)
Specialist			4.127* (2.252)
Expert			3.205 (2.663)
Target Company Size (Reference: 20 - < 200)			
<20			-3.099 (2.124)
200 - < 2000			-0.470 (1.923)
> 2000			4.598** (1.903)
Year fixed effects	X	X	X
Federal state fixed effects	X	X	X
Observations	3,772	3,772	3,772
R2	0.039	0.093	0.103

Source: SOEP, own calculations. – Note: Robust standard errors in parentheses clustered at the individual level.

* p<0.10, ** p<0.05, *** p<0.01.

Table A5: Job satisfaction gains, entire sample: Full regression results

	(1)	(2)
Mobility Indicators (Reference: No Job Change)		
Job Change – same occupation	1.107*** (0.100)	1.106*** (0.100)
Horizontal mobility	1.651*** (0.122)	1.638*** (0.121)
Vertical mobility	1.323*** (0.264)	1.344*** (0.266)
Diagonal mobility	1.519*** (0.149)	1.499*** (0.149)
Individual and Household characteristics		
Female	-0.036** (0.017)	-0.027 (0.022)
Age (Reference: 35-49)		
20-34	-0.148*** (0.028)	-0.106*** (0.029)
50-60	0.026 (0.024)	-0.020 (0.025)
Migration background	-0.031 (0.024)	-0.014 (0.025)
East Germany	0.095* (0.057)	0.114* (0.058)
Education (Reference: professional training)		
No professional qualifications	-0.030 (0.039)	-0.015 (0.040)
University or college degree	-0.036* (0.020)	-0.024 (0.026)
Married	0.035 (0.022)	0.029 (0.022)
Children in the household	-0.021 (0.022)	-0.020 (0.022)
Occupational and Firm Characteristics		
Wage gain in Percent		0.005*** (0.001)
Current gross monthly salary		0.000* (0.000)
Part-time		0.026 (0.029)
Tenure at the current employer (in years)		0.007*** (0.001)
Company Size (Reference: 20 - < 200)		
<20		-0.007 (0.031)
200 - < 2000		0.006 (0.030)
> 2000		0.017 (0.026)
Skill level in the initial occupation (Reference: Skilled Worker)		
Helper		-0.007 (0.039)
Specialist		-0.046 (0.029)
Expert		-0.037 (0.030)
Year fixed effects	X	X
Federal state fixed effects	X	X
Observations	56,483	56,483
R2	0.035	0.039

Source: SOEP, own calculations. – Note: Robust standard errors in parentheses clustered at the individual level.
 * p<0.10, ** p<0.05, *** p<0.01.

Table 6: Job satisfaction gains, sample of job movers: Full regression results

	(1)	(2)	(3)
Mobility Indicators (Reference: Job Change – same occupation)			
Horizontal mobility	0.556*** (0.154)	0.552*** (0.153)	0.559*** (0.154)
Vertical mobility	0.220 (0.276)	0.283 (0.278)	0.320 (0.287)
Diagonal mobility	0.400** (0.168)	0.389** (0.172)	0.383** (0.177)
Individual and Household characteristics			
Female	0.033 (0.130)	0.092 (0.147)	0.102 (0.149)
Age (Reference: 35-49)			
20-34	-0.358** (0.162)	-0.358** (0.166)	-0.363** (0.164)
50-60	0.050 (0.199)	0.028 (0.202)	0.054 (0.199)
Migration background	-0.348** (0.151)	-0.358** (0.154)	-0.333** (0.152)
East Germany	0.301 (0.540)	0.333 (0.562)	0.368 (0.560)
Education (Reference: professional training)			
No professional qualifications	-0.275 (0.266)	-0.058 (0.274)	-0.033 (0.269)
University or college degree	-0.152 (0.132)	-0.130 (0.159)	-0.123 (0.164)
Married	-0.025 (0.160)	0.011 (0.158)	0.002 (0.157)
Children in the household	-0.174 (0.139)	-0.166 (0.141)	-0.159 (0.140)
Occupational and Firm Characteristics			
Wage gain in Percent		-0.275 (0.266)	-0.058 (0.274)
Current gross monthly salary		-0.152 (0.132)	-0.130 (0.159)
Part-time		-0.025 (0.160)	0.011 (0.158)
Tenure at the current employer (in years)		-0.174 (0.139)	-0.166 (0.141)
Company Size (Reference: 20 - < 200)			
<20		0.121 (0.202)	0.117 (0.209)
200 - < 2000		0.150 (0.172)	0.111 (0.185)
> 2000		-0.019 (0.186)	0.013 (0.204)
Skill level in the initial occupation (Reference: Skilled Worker)			
Helper		-0.442* (0.250)	-0.308 (0.274)
Specialist		0.082 (0.205)	0.016 (0.253)
Expert		-0.175 (0.211)	-0.192 (0.293)

Table A6: continued

	(1)	(2)	(3)
Target Occupational and Firm Characteristics			
Fulltime to Parttime			-0.195 (0.302)
Skill level in the target occupation (Reference: Skilled Worker)			
Helper			-0.466 (0.291)
Specialist			0.092 (0.253)
Expert			-0.025 (0.311)
Target Company Size (Reference: 20 - < 200)			
<20			0.042 (0.206)
200 - < 2000			0.119 (0.198)
> 2000			-0.118 (0.209)
Year fixed effects	X	X	X
Federal state fixed effects	X	X	X
Observations	3,772	3,772	3,772
R2	0.030	0.046	0.049

Source: SOEP, own calculations. – Note: Robust standard errors in parentheses clustered at the individual level.

* p<0.10, ** p<0.05, *** p<0.01.