

Labor Market Mobility in Germany

Der Wirtschaftswissenschaftlichen Fakultät der
Gottfried Wilhelm Leibniz Universität Hannover
zur Erlangung des akademischen Grades

Doktor der Wirtschaftswissenschaften
- Doctor rerum politicarum -

genehmigte Dissertation

von:

Diplom Volkswirt Stefan Schneck
geboren am 11.03.1982 in Weiden i.d. Opf.

2011

Abstract

This thesis contributes to the recent discussion about the flexibility of the German labor market. The empirical studies analyze individual mobility between jobs using German data. Specifically, chapters 2 and 3 rely on integrated employer-employee data, while in chapter 4 household data is applied. After a brief introduction about the relevance of labor market mobility in Germany (chapter 1), chapter 2 focuses on monetary consequences of individual between-establishment transitions. Counterfactual wage trajectories are estimated in order to compare the wage trajectories at different employers simultaneously. The main finding is that only few immediate wage cuts pay off because of steeper wage growth in the new job. Chapter 3 enhances the literature by an examination of the relationship between quit decisions and the relative wage position within an establishment. The main assumptions are that individuals compare themselves to colleagues within the same establishment and that workers form rational expectations about where they lie in the pay ordering. Voluntary mobility with wage cuts is analyzed in chapter 4, in which the effects of different subjective comparisons between the previous and the current job on the decision to accept earnings losses are investigated.

Keywords: Mobility, wage cut, relative wage position.

Kurzzusammenfassung

Diese Dissertation beschäftigt sich mit der Flexibilität des deutschen Arbeitsmarktes, wobei die empirischen Studien individuelle Arbeitsplatzwechsel anhand deutscher Daten untersuchen. Dabei beruhen Kapitel 2 und 3 auf integrierten Betriebs- und Personendaten, während in Kapitel 4 Haushaltspaneldata herangezogen werden. Nach einer kurzen Übersicht zur Bedeutung der individuellen Mobilität (Kapitel 1) folgen die empirischen Analysen. Kapitel 2 beschäftigt sich mit dem Vergleich von kontrafaktischen Lohnkurven, um den Lohn eines mobilen Arbeitnehmers im Ausgangs- und Zielbetrieb vergleichen zu können. Der Einfluss der relativen Lohnposition auf die Entscheidung den Betrieb zu wechseln ist Gegenstand von Kapitel 3. Dabei wird zugrunde gelegt, dass Individuen ihre relative Lohnposition anhand von Lohnvergleichen mit den Kollegen innerhalb ihres Betriebes abschätzen. Schließlich behandelt Kapitel 4 die Frage warum Personen bei einem Wechsel des Arbeitgebers Lohnabschläge akzeptieren. Die Studie basiert dabei vor allem auf subjektiven Vergleichen zwischen dem aktuellen und dem vorherigen Arbeitsplatz.

Schlagwörter: Mobilität, Arbeitsplatzwechsel, Lohnabschlag, relative Lohnposition.

Contents

1	Introduction	1
2	Inter-Firm Labor Mobility and Wages	5
2.1	Introduction	6
2.2	Data and procedure	8
2.2.1	Data	8
2.2.2	Procedure	9
2.3	Results	14
2.3.1	Main results	14
2.3.2	A subgroup analysis	23
2.4	Discussion	30
2.5	Appendix	32
3	Relative Wage Positions and Quit Behavior	34
3.1	Introduction	35
3.2	Basic theoretical framework and hypotheses	36
3.3	Data and methodological remarks	42
3.3.1	Data set	42
3.3.2	Wage measures	45
3.3.3	Econometric models	48
3.4	Results	51
3.5	Conclusions	64
3.6	Appendix	67

4	The Acceptance of Earnings Losses After Voluntary Mobility	76
4.1	Introduction	77
4.2	Framework	78
4.3	Data and procedure	83
4.3.1	Data	83
4.3.2	Descriptive statistics	86
4.3.3	Methods and procedure	88
4.3.4	Specification	91
4.4	Results	94
4.5	Discussion	116
4.6	Appendix	118
5	References	127
6	Acknowledgements	135

1 Introduction

The German labor market is characterized by a significant degree of dynamism, leading to a continuous creation and destruction of jobs. As a result, employees change their labor market status, moving from one job to another, from employment to non-employment, from employment to unemployment, from unemployment to non-employment, and vice versa. Labor market mobility, on the one hand, might increase efficiency and productivity because of reallocation of resources where they are most productive. On the other hand, this progress pushes responsibility for careers as well as uncertainty about income security onto workers. Peter Capelli (1999, p. 17) describes this with the following words: *"THE OLD employment system of secure, lifetime jobs with predictable advancement and stable pay is dead."* This thesis analyzes job-to-job mobility in Germany and, thus, contributes to the aspect of the worker's responsibility for the own career. In fact, today's employees are characterized by a large degree of self-determination and flexibility. This also includes the improvement of the own career by finding a new job and quitting the previous one. In one of his speeches, Earl Nightingale (1921–1989, American author) implicitly motivates workers to quit their jobs to a new one for climbing up the career ladder because *"Jobs are owned by the company, you own your career"*.

The seminal literature on the on-the-job search introduced the possibility that workers search for new jobs while employed. These studies, then, intended to explain quit rates and individual quit behavior. This early literature, however, mainly focused on wage maximization problems in voluntary mobility. This implies that workers form their decisions to change jobs only by comparison of wages which can be obtained in different firms. The next chapter of this thesis empirically contributes to this literature and

examines whether mobility to a new job pays off in the long run. This work differs from other studies because it applies an innovative methodology based on firm-specific estimation of counterfactual wage trajectories. More recent on-the-job search literature change focus from wage-maximization to utility-maximization where bundles of various job characteristics (including wages) affect the decision to quit a job voluntarily. Chapter 3 enhances this literature via an empirical examination of the relationship between quit decisions and the relative wage position within a firm. This is an important determinant of the own career because it might signal future career prospects and could be interpreted as reputation or status within a firm. The analysis explicitly controls for the monetary component, in order to account for wage effects in labor market quit decisions. Another aspect of this chapter is whether workers are mobile to lower wages if they can improve their relative wage position in the new firm. Individual quits with earnings losses are further analyzed in chapter 4, in which the effects of different job-specific (non-wage) characteristics on the decision to accept wage cuts are examined. Therefore, this study contributes to the so far sparse literature about the reasons for this behavior. It is important to note that empirical analyzes always have some drawbacks. The most serious problem in this thesis concerns the definition of voluntary job-to-job mobility. The data, in fact, do not allow for distinct definitions regarding voluntary quits in chapters 2 and 3. The studies, however, refer to measures which are arbitrary to those used by other researchers and provide robustness checks with respect to different definitions of voluntary quits to a new job. In the following part of this introduction, the main findings and conclusions are summarized.

Chapter 2 is to conclude on whether staying at the same employer or moving to a different employer pays off in the medium term. This study is the first which estimates individual counterfactual wage profiles in order to compare wages at different employers simultaneously. This allows conclusions about the monetary consequences of individual mobility. The results show that most mobile workers achieve permanently higher wages when being mobile once. A substantial share of mobile workers, in turn, suffers wage cuts when changing the establishment. A major finding of this study is that less than

one in three immediate wage cuts is beneficial in the future. One explanation is that job-specific amenities play a role for transitions to permanently lower wages. An important topic for further research is comparison of the basic findings achieved with German linked employer-employee data with those obtained in other countries. A further promising field for future research is the inclusion of job-related amenities to conclude about the individual trade-off reasoning between job-specific amenities and wages.

Chapter 3 deals with the effect of individual relative wage positions which can be interpreted as a worker-specific amenity. The main point of interest is the effect of the relative wage position on the decision to voluntarily quit a job. The results show that relative wage positions have a significant impact on the probability to voluntarily quit a job. In addition, the study concentrates on both, linear as well as nonlinear effects. When considering linear effects, the analysis suggests that workers with high relative wage positions within their firms are more likely to quit a job in comparison to workers with low relative wage positions. This finding is consistent with the results of a study conducted with Italian data. The results can also be incorporated into the literature about interdependent preferences and the determinants of subjective well-being because the position in the pay ordering within a firm also has significant impact on job satisfaction, as found in a recent study conducted in Denmark. This thesis, however, goes beyond the scope of existing studies and introduces considerations about a nonlinear relationship as well as individual trade-off reasoning when changing jobs. The analysis of nonlinear effects of relative wage positions in quit decisions reveals a U-shape between the wage rank and the decision to quit. An explanation is that workers at the bottom of the within-establishment pay scale are more sensitive to status considerations and those at the top to signal considerations. In other words, workers in low relative wage positions quit their jobs because of their low status while workers in high relative wage positions quit because of low future career prospects. Finally, this chapter reveals that relative wage positions are significantly correlated with the probability to be mobile to lower wages. Workers who improve their relative wage position compared to the previous establishment are, on average, less likely to pay for mobility by lower wages. Trade-off reasoning between

wages and relative wage positions, thus, is not evident in this study.

The last part of this thesis concentrates on mobility to lower wages. Studies show that more than one in three individuals pay for a new job by lower wages in the U.S., Germany, France, and Denmark. Literature, however, lacks detailed information on the reasons for mobility to lower wages. Chapter 4 sheds light on this behavioral pattern and examines the relationship between a variety of different subjective improvements in a diversity of job-specific amenities between two jobs and the willingness to pay for them. The results suggest that individual trade-off reasoning is evident. Specifically, individuals are found to pay for improvements in workload by lower wages. As chapter 2 shows that transitions to permanently lower wages are common, it might be hypothesized that workers trade off permanently lower wages with subjective improvements in job-specific characteristics (e.g., improvements in workload). The results also indicate compensating wage differentials for job-specific disamenities which are, however, to the largest extent, statistically insignificant.

In sum, this thesis shows that labor market mobility is very complex in nature. Combination of all the different aspects discussed in this thesis is a promising field of research. Nevertheless, it is problematic to find linked employer-employee data which combine long time horizons, job-specific amenities, wage information, and detailed information on the reason of mobility that allow for a joint investigation of all of the points addressed in this thesis.

2 Inter-Firm Labor Mobility and Wages

Individuals who want to leave their employer usually raise the question whether mobility to a new employer pays off in the future. This paper contributes to this question by examining the consequences of labor market mobility in the medium-term. Conclusions regarding whether an individual's wage trajectory at the new employer exceeds the one of the previous employer are drawn by application of an innovative procedure which involves the simultaneous investigation of wage trajectories at different employers. The main finding is that a considerable number of workers experience wage cuts which are of permanent nature. Only few of the transitions to lower wages pay off because of steeper wage growth in the new job.¹

¹This chapter was originally published as "Inter-Firm Labor Mobility and Wages", *Jahrbuch für Wirtschaftswissenschaften (Review of Economics)*, Vol. 61, 196–211. Publication within this thesis with kind permission of Vandenhoeck & Ruprecht GmbH & Co. KG. This study uses the Cross-sectional model of the Linked-Employer-Employee Data (LIAB; years 1993-2006) from the Institute for Employment Research (IAB). Data access was provided via on-site use at the Research Data Centre (FDZ) of the German Federal Employment Agency (BA) at the IAB and remote data access.

2.1 Introduction

Labor market mobility is an outstanding characteristic of labor markets (Burgess et al. 2000, OECD 1997). This is also true for the German private sector, where individuals are unlikely to stay in one job over their entire working life. In fact, Winkelmann (1994) shows that male German workers hold an average of four lifetime jobs. Jolivet et al. (2006), Nosal and Rupert (2007), and Fitzenberger and Garloff (2007) show that wage markups and wage cuts coexist with mobility. It is further illustrated that a small proportion of workers is mobile and experiences no wage changes². This paper is motivated by these results and contributes to the investigation of medium-term consequences of immediate wage cuts and wage markups.

Literature on the immediate consequences of job-to-job mobility is wide spread and states that wage markups as well as wage cuts coexist. Borjas (1981) emphasizes that an individual's earnings profile is discontinuous across jobs because job mobility on average results in a higher wage. Upward mobility is empirically confirmed by other studies (e.g., Topel and Ward 1992). Jolivet et al. (2006) show that 60.4% of German job-to-job transitions are to higher wages. Downward mobility is also shown to be frequent. In Denmark, France, and Germany, more than one in three mobile individuals change jobs at the price of a wage cut (Jolivet et al. 2006). In the U.S., Nosal and Rupert (2007) show that 42% of individuals voluntarily changing jobs suffer wage cuts.

However, individuals who are confronted with thoughts of leaving the employer usually evaluate their alternatives and raise the question whether mobility to a new employer pays off in the future.³ Individuals, thus, are interested in the medium- or long-term consequences of their decision rather than in an evaluation of immediate success. In fact, it is hard to assess the consequences of mobility because it is problematic to conclude whether the individual within-firm wage path exceeds the between-firm (i.e., mobility) wage path. The main problem is, obviously, that individual wages of the main job are not

²Nosal and Rupert (2007) show that about 8% of all workers and approximately 5% of voluntarily mobile workers change jobs to the same wage.

³In the data used here, establishments are observed. From now on, firm, employer, and establishment are used interchangeably.

simultaneously observable across firms. The availability of matched employer-employee data and application of the firm-specific estimation approach of Abowd et al. (2006) help to solve this problem. The innovative procedure applied here involves estimation of wage equations for each single firm. In a next step, the results are applied to predict average wage paths at different employers which are used for the simultaneous analysis of individual wage trajectories at different firms. This procedure allows to address the following questions:

1. *In comparison to the old employer, do mobile workers achieve permanently higher wages at the new employer?*
2. *Do workers change to lower wages?*
3. *How many immediate wage cuts pay off in the future?*

This paper, thus, contributes to the immediate wage change of mobility and assesses the long-run consequences. A special focus is on the acceptance of wage cuts in the period of mobility. Connolly and Gottschalk (2008) and Postel-Vinay and Robin (2002) argue that wage cuts are accepted by mobile individuals because of greater wage growth in the new job. Downward mobility, therefore, can be justified as an investment in future wage growth. The results, however, show that workers frequently change to permanently lower wages while only a small share of workers is shown to pay for steeper wage growth at the new employer by wage cuts. This might be explained by differences in non-wage characteristics between the old and the new job which also might enter mobility decisions (Nosal and Rupert 2007).

The paper is structured as follows. Section 2.2 explains the data and the empirical procedure. Section 2.3 presents the results and section 2.4 the conclusions.