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The Double Polarisation of Unskilled Work

Labour Market Mobility and Job Stability of Unskilled Employees in the Course of Time: Evidence from German Register Data

Marcel Erlinghagen

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von

Marcel Erlinghagen

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Korrespondenzanschrift:

**Dr. Marcel Erlinghagen
Ruhr-Universität Bochum
Fakultät für Sozialwissenschaft
Lehrstuhl für Sozialpolitik und Öffentliche Wirtschaft
GC 04/309
D-44780 Bochum
erlinghagen@iatge.de**

Telefon 0234 - 32 22420

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The Double Polarisation of Unskilled Work

*Labour Market Mobility and Job Stability of Unskilled Employees
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*by Marcel Erlinghagen**

Abstract

Since the labour market situation of unskilled workers have become worse during the last decades this group should generally show a significant reduction of individual movements into newly started jobs, a significant growth of individual transitions into unemployment and a significant reduction of individual job stability. However, by analysing event history data for West Germany the paper makes clear that unskilled workers have faced a ‘double polarisation’ during the last decades. Some unskilled workers are still marketable in service society whether others have been widely excluded from employment. The impact of soft skills as an important determinant of this double polarisation process is discussed.

Acknowledgments

All presented analyses were done within the project “Arbeitsmarkt-Monitoring” at the “Institut Arbeit und Technik” (IAT), Gelsenkirchen. The data base of this paper is the factual anonymised „IAB Employment Subsample“ (Regionalfile 1975 – 2001). Data access has been carried out by a scientific use file that can be drawn from the “Forschungsdatenzentrum” of the “Institut für Arbeitsmarkt- und Berufsforschung (IAB)” at the “Bundesagentur für Arbeit” in Nurnberg.

* Dr. Marcel Erlinghagen is Research Assistant at the Chair of Social Policy and Public Administration at the Faculty of Social Science, Ruhr University Bochum, and at the “Institut Arbeit und Technik” (Institute for Work and Technology IAT) in Gelsenkirchen, Germany. He is also Research Affiliate of the German Institute for Economic Research (DIW) in Berlin.

Introduction

During the last decades the number of unskilled workers has shrunk in almost all industrialised countries (Nickel and Bell 1995; OECD 1997). It is suggested that this reduction is caused by shrinking demand as well as shrinking supply of unskilled labour. Regarding the shrinking demand some authors stress the influence of technological changes that have occurred during the last decades. Especially the inventions in information and communication technologies have led to an increasing rationalisation of production and, therefore, have resulted in the massive destruction of employment opportunities for unskilled workers (c.f. Berman et al. 1998). Another argument is that the vast reduction in demand for unskilled workers is mainly caused by the growing international competition with low wage countries (c.f. Borjas et al. 1992; Wood 1995; Minford et al. 1999). Beside the shrinking demand there has also been a decline in supply of unskilled labour because of an enormous educational expansion (c.f. Shavit and Blossfeld 1993). In addition there has been more or less a crowding-out of unskilled workers what has led to an increasingly “overeducated” workforce (see Borghans and de Grip 2000 for an overview). Since Germany is one of the leading industrialised countries it is quit clear that unskilled workers in Germany should be affected by these developments. Thus, in Germany the number of employees who have no occupational degree has cut in half since the mid 1970s. And despite the growth in educational attainment there is still a surplus of unskilled workers what leads to a very high unemployment rate of this group (25 % in West Germany and even 50 % in East Germany) (Reinberg and Hummel 2002).

Although shrinking demand for and supply of unskilled labour is an internationally observable phenomenon it can be suggested that the country-specific characteristic of this development is strongly shaped by country-specific institutions. On the one hand the quality and quantity of demand for unskilled labour should be influenced by welfare state institutions. Germany is often described as a conservative welfare state regime in which institutions are aimed to maintain the social status of individuals. This is reached, for example, by social security systems that provide assistance in relation to former paid contributions. That means that the German kind of de-commodification is a powerful instrument of stratification (Esping-Andersen 1990). On the other hand the demand for unskilled labour should be influenced by the way an economy has organised its production. Regarding the organisation of production one important aspect is the way employers and employees interact. Thus, Germany is often described as a coordinated market

economy which is characterised, for example, by centralisation of wage bargaining processes (Hall and Soskice 2001; Fuchs and Schettkat 2000; Ebbinghaus and Kittel 2005). In such an economy cooperation between firms and trade unions is crucial for the way labour is allocated. In addition the supply of unskilled labour should be affected especially by country-specific educational institutions. Compared to other countries the German educational system can be described as strongly standardised and stratified (Allmendinger 1989). Within such a system career paths are much more clearly predetermined than in less standardised systems. Since the described three spheres ‘welfare state institutions’, ‘production regime’ and ‘educational system’ have all together a strong impact on the labour market the specific German institutional setting could be summarised as a coordinated, stratified and standardised employment regime.

In company with the arising globalisation debate the coordinated German employment regime is said to be too rigid and too inflexible to adapt on the challenges of the 21st century world. Some commentators blame this supposed inflexibility as the main reason for the bad German labour market performance compared for example with countries like the USA (c.f. Siebert 1997; see also Blau and Kahn 2002). In this respect it is supposed that the institutional setting of the German employment regime is especially harmful for unskilled workers. Whereas other industrialised countries could react with a lowering of wages on the increased international competition the importance of collective agreements leads to a relatively high minimum wage level in Germany. In such a situation of limited labour market efficiency employers should react with increasing rationalisation efforts to replace unskilled labour through technological solutions and an increased productivity of skilled employees. In addition the creation of low skilled service sector jobs with their lower potential of rationalisation could be seriously impeded. Thus, a vicious cycle could be expected that continuously worsen the labour market situation of unskilled workers in general: More and more unskilled employees (‘insider’) were dismissed and join the already large group of outsiders with no chance to get ever back into employment. Finally we should expect a significant collapse of the labour market for unskilled workers in Germany.

In a dynamic perspective such a macro level situation should have certain impacts on the individual labour market mobility and job stability of unskilled employees in the course of time. A general decrease in employment opportunities and a general increase of dismissal risks should be reflected in a significant reduction of individual movements

into newly started jobs, in a significant growth of individual movements into unemployment and in a significant reduction in individual job stability.

Within current scientific as well as public debates unskilled workers are often described as a homogeneous group. *Section 1* criticise this homogeneity assumption and stress the heterogeneity of unskilled work especially with regard to the increasing importance of informal ‘soft’ skills even in this segment. Out of this critique it is hypothesised that there should be some signs of a double polarisation within the segment of unskilled with growing employment risks and employment chances *at the same time*. Since it is not possible to estimate the impact of soft skills on employment chances and risks of unskilled employees directly in the course of the following analyses some bridge hypotheses are formulated according to the connection between important socio-economic variables, soft skills and individual labour market performance of the unskilled. Derived from these assumptions suggestions are made which individual characteristics will help unskilled workers to be or respectively remain marketable in service society’s labour market. After that *section 2* describes briefly the data that is used in the following investigations. Within *section 3* the descriptive as well as the regression results are presented and interpreted. Finally *section 4* concludes.

1 The heterogeneity of unskilled work

One of the great inventions of economic human capital theory (Mincer 1962; Becker 1964) and sociological dual labour market theory (Doeringer and Piore 1971; Lutz and Sengenberger 1974) was that the assumption of homogeneity provided by the neoclassical economic standard market model was modified. Obviously the workforce is not homogeneous but consists of individuals with heterogeneous qualifications and skills. However, this is only true for individuals who have any kind of skills or qualifications at all. By definition unskilled workers are just characterised by their lack of skills and, therefore, it is supposed that this labour market segment is in this respect still largely homogeneous.

We have to keep in mind that beside the increasing importance of vocational qualifications represented, for example, by formal training certificates also a growing importance of informal qualifications can be observed during the transition to service society (McIntosh and Vignoles 2001; Dickerson and Green 2004). Such informal qualifications could be described as ‘soft skills’ starting from basic literacy and numeracy or basic computing skills up to the more complex ability to communicate or the ability of

self-management (for an overview over the corresponding literature see Borghans et al. 2006: 2-3). In Europe, for example, this point plays an important role in the current 'employability' debate (for an overview see Peck and Theodore 2000; McQuaid and Lindsay 2005)

The overriding assumption of the paper is that not only highly qualified workers have to face an increasing importance of soft skills but also within the segment of unskilled work the importance of informal qualifications have risen during the last decades. For example, Green et al (2000: 100-101) found out for Britain that since the 1980s there has been "an increased usage of problem solving skills, of communication and social skills, and of computing skills, and at the same time a reduction in the use of manual skills. [...] Perhaps surprisingly, there are no major occupational groups that have not experienced skill increases of some sort between 1986 and 1997" (see also Osterman 2001; de Grip and Zwick 2005). Thus, unskilled workers are no homogeneous group (anymore?). Therefore, it is supposed that formally unskilled have to face a growing in-group division of labour market chances and risks depending on their individual soft skills capabilities. Since aggregated labour market chances and risks are reflected in certain individual mobility patterns the following analyses will concentrate on the evolution of job stability and labour market mobility of unskilled employees in the course of time.

The best way to ascertain the influence of soft skills on labour market mobility and job stability would be to integrate soft skill variables in our empirical investigations. Beside the general problem how to measure soft skills (c.f. Dickerson and Green 2004) the data set that will be used in the course of the following analysis (and which will be described in the next section) does unfortunately not contain any variable that could be used as a simple soft skill proxy. Therefore, the analysis can (a) only try to find some evidence that there are not only increasing mobility risks of unskilled compared to skilled workers but that there are some signs of an increasing polarisation of mobility chances and risks *within* the group of formally unskilled workers. And if we really can find such signs of polarisation within the group of unskilled we can ask (b) which individual characteristics increase the probability to belong to the "winners" or "losers" of this polarisation process.

Although it is not possible to investigate into the immediate influence of individual soft skill capabilities on mobility processes we can formulate some ancillary hypotheses. With the aid of these hypotheses it should be possible to suggest which individual

characteristics of unskilled workers have increased the employment chances and which one have increased the employment risks since the individual soft skill capabilities will be unevenly distributed by certain socio-economic variables covered by our data:

- Unskilled women should enhance their relative labour market position compared to men because we can suggest that women have higher informal communication and social skills because of gender specific socialisation differences (c.f. Gilligan 1991; Borghans et al. 2006).
- The relative labour market position of unskilled migrants should deteriorate compared to unskilled Germans because migrants should show lower language and communicative competences. In addition, the situation of migrants can be worsen by discrimination effects (c.f. Holzer and Ihlantfeldt 1998; Borghans et al. 2006).
- Not only because of negative effects of physical and cognitive ageing on individual productivity younger unskilled should improve their relative labour market position compared to older birth cohorts in the course of time. This could have several reasons. First it can be suggested that younger people are more flexible to adapt to changing working requirements in respect, for example, to new forms of work organisation (c.f. Boockmann and Zwick 2004). In addition, younger workers are more flexible with regard to residential movements (Boyle et al. 1998), even if there is some evidence that in general perspective unskilled workers are less regionally mobile than skilled workers (see for example Windzio 2004 for Germany). Furthermore the importance of basic and practical knowledge of the utilisation of information technologies (e.g. using the internet, mobile phones, etc.) has grown even in unskilled jobs (Dickerson and Green 2004). Since it can be assumed that younger birth cohorts have generally greater practical experiences with present-day technology (e.g. operating consumer electronics) they should have higher computer skills (c.f. Borghans and ter Weel 2002; Weinberg 2005) and, therefore, have better employment chances than older age groups at least in the segment of unskilled work (on the discussion if computer skills really improve individual labour market outcomes see DiNardo and Pischke 1997; Borghans and ter Weel 2004). Furthermore lower computer skills as well as lower intra-firm task flexibility of older age groups can also be caused by lower training investments because of their nearing retirement (c.f. Bartel and Sicherman 1993; Friedberg 2003).
- Due to overall structural changes people working in service sector jobs seem to have lower unemployment risks than comparable individuals working in manufac-

turing (for Germany see Erlinghagen 2004). Thus, unskilled service sector workers should enhance their relative labour market position compared to workers in manufacturing during the transition to service society. And if unskilled employees in service sector jobs show really higher employment chances and lower unemployment risks than employees in manufacturing this could be an indicator of an increasing importance of soft skills since service sector jobs show higher soft skill requirements as we, for example, know from analyses of the provision of home care services (Schmid and Hasenfeld 1993), of the restaurant and hospitality sector (Baum 2002) or of the retailing sector (Tilly and Moss 2000).

- The relative labour market position of unskilled people who have had employment gaps within their past life history (e.g. periods of unemployment or episodes they were out of the labour force) should deteriorate compared to continuously employed workers. This could be the case because the increasing importance of soft skills makes it much more complicated for employers to find an adequate applicant for a job vacancy. Miscasts would be costly even in the segment of formally unskilled work. Therefore, the importance of productivity signals could lower the danger of wrong employment decisions. Previous employment gaps could work as productivity signals because employment interruptions are often connected with interruptions in the building of human capital. In addition employment gaps can also stand for real individual deficits that has caused former unemployment periods (c.f. Heckman and Borjas 1980; Arulampalam et al. 2000; for Germany see Erlinghagen 2004).

2 Data

For Germany the IAB Employment Subsample (IABES) is particularly well suited as a data set for the analysis of labour market mobility and job stability. The IABES contains exact daily data on the employment careers of some 1.3 million individuals over the period between 1975 and 2001. The data set is derived from a 2% sample of the insurance accounts that the Federal Labour Office (*Bundesagentur für Arbeit*) maintained in respect of employees liable to pay social security contributions between 1975 and 2001. Therefore, any analysis of the IAB employment subsample must be confined to insurable employment. Consequently, the self-employed, civil servants and those in marginal part-time employment are not included in the following analyses (Bender et al. 2000; Hamann 2004; Hamann et al. 2005). However, since at the end of the investigation period about 75 per cent of the economically active population was still in insurable em-

ployment (c.f. Grotheer and Struck 2003), making it by far the most widespread employment form in the German labour market, this data set captures the overwhelming share of labour market events. In addition, our analysis will include only those individuals who were employed throughout their working lives solely in West German establishments; the concentration on West German employees ensures that the period of analysis is sufficiently long. In addition all spells representing periods of apprenticeship training will be eliminated from the data set.

The ‘process-produced data’ of the IABES are supplemented by information on periods of unemployment during which a claimant received benefits and on certain characteristics of the establishments that employed individuals in the subsample during the period of observation. This corresponds to about 21 million employment or benefit payment notifications, with each individual record containing approximately 35 variables.

3 Results

3.1 The evolution of fluctuation

First of all we should ask how unskilled workers’ fluctuation in and out of employment has changed in the course of time. Figure 1 show entry and exit rates that were calculated by dividing the number of jobs begun or respectively ended in a calendar year by the average number of jobs that have existed within this certain year. The average of the entry and exit rates is the so-called labour turnover rate (LTR) (c.f. Schettkat 1996). Thus the LTR is an indicator of total labour market mobility. Calculations that were presented in the appendix of this paper make, however, quite clear that especially temporary agency work plays an important and growing role in the segment of unskilled employment (Garhammer 2002). Because the fluctuation of this kind of employees has strongly increased especially during the 1990s it is necessary to minimise this influence if we are interested in the evolution of unskilled workers’ fluctuation in general. Although we can not identify individual temporary agency workers within our data set we can try to eliminate their influence on overall fluctuation by excluding employees who work in the branch of ‘production related services’ since in the IABES employment in temporary employment agencies were recorded under the heading of this branch.

figure 1: *Entry-, Exit- and Labour-Turnover-Rate (LTR), unskilled employees (without production related services), West Germany 1976 to 2001*



Labour market mobility of unskilled workers show the classical cyclical evolution with a shrinking mobility during economic downturns (1981-1983; 1991-1994) and an increasing fluctuation during economic upturns (1984-1990; 1996-2000). This effect can be explained by the fact that the replacement chains become longer in upturns and act as a multiplier on mobility. Beside cyclical influences we see a slight increase of unskilled workers' labour market mobility. There is no doubt that one main source of this growth in overall fluctuation is the almost permanent increase of exit rates since the first half of the 1980s (1983: 29 %; 2000: 39%). This result is not really surprising since the massive loss of jobs for unskilled employees is rather well known and documented.

The situation for unskilled employees has become worse during the 1990s and, therefore, it could be expected that the gap between exit and entry rate should widen. And this could really be observed for the period between 1991 and 1996. But what is really unexpected is that although the employment situation in 1993 is much worse than ten years before, a relatively higher entry rate in employment can be observed (1983: 26%, 1993: 28.5%). Even more surprisingly not only the exit but also the entry rates increase strongly during the second half of the 1990s. In addition, the growth of entry rates is higher than of exit rates and, as a result, the gap between both fluctuation rates narrows at the end of our investigation period again. These results make clear that there must be a certain share of unskilled employees who is (still?) able to find new jobs and who is,

therefore, (still?) marketable in service society. Thus, the results confirm that there has been some kind of polarisation of employment chances and risks within the group of unskilled workers.

3.2 The evolution of job stability and the quality of transitions

The next step is to estimate cox proportional hazard rate models to get more detailed information about the hypothesised polarisation process. Within our estimations a set of explanatory variables is included. We control for gender, nationality (two categories), age (5 categories), the kind of job (six categories), branch (11 categories) and spatial context (three categories). We also include information of the former individual employment history (e.g. unemployment experience or number of employment gaps). In addition the regional yearly unemployment rate and the economic growth measured by the increase of the GDP are included as explanatory variables.

Because the probability of job termination shrinks with increasing tenure we do separate estimations for three groups of jobs:

- estimation type (a):* newly started jobs (“zero tenure”)
- estimation type (b):* jobs with tenure between one and two years
- estimation type (c):* jobs with tenure of minimum five years

Furthermore we will estimate an unspecified transition model for the general event of leaving a job. The end of an employment spell (‘exit’) is defined as the termination of an existing insurable job. Second, we will estimate a competing risk model in which we distinguish between four different kinds of events:

- (1) *transition to a new employer (‘firm change’)*
- (2) *transition to registration gap (‘out of the labour force’)*
- (3) *transition to short term unemployment*
- (4) *transition to long term unemployment*

All estimations were done for three different historical periods. April 1st has been chosen as a reference date and job stability and mobility patterns were compared of employees who were in employment on this reference date in the years 1983, 1990 and 1996. Hence, it is possible to compare job stability and mobility patterns from the mid1980s to the beginning 1990s and to the second half of the 1990s.

Table 1 shows the Hazard Ratios for the three estimation types each for jobs with different elapsed tenure. The estimation results for the included control variables are omitted. The first column shows the results for the general transition model whereas the columns 2 to 5 present the findings for the competing risk estimations. Model 2 estimates the transition probability for the event of firm change, model 3 and 4 show the Hazard

Ratios for transitions to short and respectively long term unemployment. Finally, column 5 contains the Hazard Ratios for transitions into a registration gap.

The Hazard Ratios of the general transition model show shrinking job stability for all three tenure groups comparing the three historical periods in question. In 1996 the probability to leave an old job is significantly higher than in the first half of the 1980s. This generally decreased stability is caused by different reasons:

First, although unskilled workers' unemployment rates have risen in the course of time the Hazard Ratios for the event of firm change has also increased until the second half of the 1990s. This is especially true for unskilled employees with high tenure. But even workers with tenure of 0 to 6 months have significantly rising firm change risks comparing the end of the 1990s to the beginning of the 1980s.

Second, while the propensity for a transition to short term unemployment has significantly decreased we find a growing risk for transitions into long term unemployment. If we look on the results in detail we see that unskilled workers with an elapsed tenure of more than five years have faced a dramatic increase in long term unemployment risk at the beginning of the 1990s. However, at the end of our investigation period the relatively high long term unemployment risk decreases again, although it is still higher than in the beginning 1980s.

Third, all tenure groups show an increasing transition to registration gaps. This kind of mobility is hard to interpret because the state of registration gap is very heterogeneous. Beside this problematic interpretation it should be noted that on the one hand employees with an elapsed tenure of more than one year are legally entitled to receive unemployment benefits in Germany. And if we remember that in the IABES data the state of unemployment is operationalised by receiving unemployment benefits it is obvious that on the other hand the transition to registration gap is likely to be a transition out of the labour force. However, we can not say if those transitions out of the labour force are transitions for example into episodes of qualification or into episodes of full time child care.

The estimation results have shown that unskilled workers' mobility pattern have changed remarkably in the course of time. The generally decrease in job stability is produced by increasing mobility chances through firm changes as well as by increasing mobility risks through transitions into long term unemployment at the same time. Therefore, the findings confirm that within the group of unskilled workers there has been a polarisation of employment chances and risks during the transition to service society.

table 1: Hazard Ratios for jobs with different elapsed tenure, unskilled, West Germany (Estimation 1-5, robust standard errors, results for control variables omitted)

Estimation¹ (tenure 0-6 months)					
	1	2	3	4	5
1983	Ref.	Ref.	Ref.	Ref.	Ref.
1990	0,97**	1,07	0,86**	1,38**	0,97
1996	1,16**	1,28**	0,96	1,44**	1,18**
Estimation¹ (tenure 1-2 years)					
	1	2	3	4	5
1983	Ref.	Ref.	Ref.	Ref.	Ref.
1990	1,11**	1,31**	0,78**	1,12	1,13*
1996	1,14**	1,43**	0,77**	1,18*	1,24**
Estimation¹ (tenure > 5 years)					
	1	2	3	4	5
1983	Ref.	Ref.	Ref.	Ref.	Ref.
1990	1,29**	1,41**	0,85	2,49**	1,10**
1996	1,20**	2,08**	0,80**	1,14*	1,06*

source: IABES (own calculation)

* p <= 0,05 / ** p <= 0,01

¹ 1: all transitions / 2: firm change / 3: transition to short term unemployment (<=12 months) / 4: transition to long term unemployment (>12 month) / 5: transition to registration gap

3.3 Winners and losers

Up to this point we estimated transition rate models using the complete data set and calculating the changes in transition probabilities including dummy variables for those historical periods that should be compared. To learn more about the background of the observed polarisation process we now make separate estimations for each of the three historical periods. This allows us to compare for example women's Hazard Ratios of the beginning 1980s with Hazard Ratios of the beginning 1990s and also the second half of the 1990s. The estimated Hazard Ratios are documented in table 2, 3 and 4.

It becomes obvious that the post-unification period of the beginning 1990s was a very unique historical period. Even unskilled employees were able to participate in the so called 'unification boom' with its extra ordinary economic upturn. Especially unskilled workers in the construction industry show a reduction in their labour market risks and a rise in their employment chances during the beginning 1990s what could be explained by the enormous investments in private and public infrastructures in view of the ailing production and transportation facilities in the former socialist GDR that have to be modernised quickly to develop the new markets of East Germany and respectively Eastern Europe. However, above this general evolution the period of the first half of the 1990s was also characterised by a massive exclusion of older unskilled employees. In

the first place this exclusion was carried out through transitions into long term unemployment. But we have to keep in mind that in the case of Germany the exclusion of older employees was a socially accepted early retirement strategy with the aim to reduce labour supply. Thus, for older employees long term unemployment was a socially accepted way to leave the labour force early that was supported by a broad coalition of political parties, trade unions as well as employer associations (Knuth and Kalina 2002). Beside the impact of (early) retirement age is generally very powerful in explaining mobility processes (c.f. Mincer and Jovanovic 1981). Since we are especially interested into changes that have occurred in the course of time we can say that younger unskilled employees up to the age of 35 can be described as the 'winners' of the transformation to service society because of their shrinking long term unemployment risk. In addition, this group also shows growing transitions out of the labour force. Although these transitions are hard to interpret because of the heterogeneity of this state, it is indeed possible that this result reflect increasing training participation as well as growing family commitments of younger unskilled workers that results in a significant withdrawal of the labour market.

table 2: Hazard Ratios for job transitions (tenure 0-6 months), unskilled, West Germany

	destination states														
	1983	all 1990	1996	firm change			short term unemploy.			long term unemploy.			registration gap		
	1983	1990	1996	1983	1990	1996	1983	1990	1996	1983	1990	1996	1983	1990	1996
gender															
women	0,79**	0,80**	0,82**	0,77**	0,75**	0,77**	0,78**	0,83**	0,85**	0,48**	0,67**	0,69**	0,90	0,84**	0,85**
nationality															
non-German	0,92**	0,96*	1,07**	0,92**	0,85**	0,87**	0,89*	0,94	1,08	0,75**	1,06	0,98	1,03	1,05	1,22**
age															
missing	1,07*	1,17**	1,11**	1,01	0,98	0,94	1,08	1,00	1,14*	0,79	0,58**	0,62**	1,17**	1,53**	1,37**
Up to 25 years	1,52**	1,95**	1,78**	1,60**	1,89**	1,82**	1,44**	1,40**	1,58**	1,24*	0,86	0,76*	1,58**	2,49**	2,14**
26-35 years	1,21**	1,23**	1,30**	1,17**	1,27**	1,26**	1,13*	1,08	1,21**	1,31**	1,04	0,93	1,26**	1,37**	1,46**
36-45 years	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.
46-55 years	1,03	0,98	0,95*	0,70**	0,79**	0,95	1,07	1,06	1,00	1,27**	1,33**	1,14*	1,18**	0,99	0,82**
55-62 years	1,47**	1,47**	1,30**	0,59**	0,57**	0,87	1,19	1,43**	1,23**	1,98**	2,62**	1,84**	2,41**	2,03**	1,51**
branche															
Agriculture & mining	1,76**	1,33	1,92**	1,35*	0,76	0,96	2,63**	2,34**	2,03**	1,24	0,97	1,14	1,03	1,37	2,58**
Basic industry	1,33**	1,11	1,17**	0,95	1,04	1,04	1,90**	1,40	1,41**	0,83	1,34**	0,86	1,09	1,00	1,18*
Investment goods	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.
Consumption goods	1,16*	1,11**	1,06	1,16	1,12*	0,93	1,22	1,33**	1,10	1,32**	1,27*	1,21	1,09	1,02	1,11
Food	1,98**	1,46**	1,38**	1,75**	1,38**	1,28	2,15**	1,85**	1,61**	1,68	1,50**	1,18	1,98**	1,37**	1,39**
Construction	1,88**	1,49**	1,62**	1,56**	1,32**	1,16	2,63**	1,95**	2,05**	1,53**	1,03	1,01	1,34**	1,38**	1,51**
Retail	1,63**	1,36**	1,25**	1,79**	1,50**	1,46**	1,63**	1,16	1,00	1,50**	1,05	0,99	1,54**	1,38**	1,39**
Transport & communication	1,29**	1,28**	1,06	1,70**	1,50**	1,88**	1,19	0,99	0,69**	0,90	0,82	0,67**	1,23**	1,33**	1,08
Production related services	1,78**	1,93**	1,67**	2,22**	2,55**	2,38**	1,46**	1,19**	1,13	1,57**	1,43**	1,01	1,71**	1,87**	1,92**
Household related services	2,12**	1,78**	1,59**	2,01**	1,62**	1,59**	2,66**	1,97**	1,60**	1,75**	0,98	1,08	1,84**	1,88**	1,74**
public services	1,39**	1,17**	1,19**	1,31*	0,88	1,06	1,75**	1,52**	1,06	2,22**	2,01**	2,00**	1,12*	1,06	1,15**
previous events															
Unemployment	1,31**	1,14**	1,09**	0,84**	0,94*	0,85**	4,41**	3,96**	3,77**	3,30**	2,54**	2,67**	0,59**	0,58**	0,43**
Registration gap	1,42**	1,31**	1,29**	0,99	0,99	1,02	0,98	1,03	1,02	1,08	1,06	1,11	2,99**	2,11**	2,19**
Firm change	0,80**	0,87**	0,86**	0,97	0,95	0,97	1,07	1,26**	1,33**	1,17	0,87*	1,09	0,58**	0,69**	0,64**
Change of occupation	1,01	1,02	1,04	1,32**	1,17**	1,22**	0,95	1,01	0,99	1,73**	1,63**	1,34**	0,80**	0,80**	0,82**
Macro indicators															
Unemployment rate	1,00	1,00	0,99**	0,95**	1,00	0,99**	1,00	1,00	0,99**	1,18**	1,00**	1,00	1,00	1,00	0,99**
Growth of GDP	0,81**	1,10**	0,85**	0,79**	1,21**	0,54**	0,65**	1,04	0,81*	1,08	0,93**	0,72**	1,00	1,12**	1,08*
N	20.752	26.635	20.055	20.752	26.635	20.055	20.752	26.635	20.055	20.752	26.635	20.055	20.752	26.635	20.055
Transitions	15.927	20.109	16.284	3.402	5.940	3.560	5.420	4.300	4.270	993	1.192	1.598	5.825	8.501	6.648
Pseudo-R ²	0,008	0,008	0,007	0,011	0,013	0,013	0,035	0,032	0,035	0,049	0,028	0,029	0,025	0,021	0,030

source: IAB-Employment Subsample (own calculations) * p <= 0,05 / ** p <= 0,01

table 3: Hazard Ratios for job transitions (tenure 1-2 years), unskilled, West Germany

	destination states														
	1983	all 1990	1996	firm change			short term unemploy.			long term unemploy.			registration gap		
	1983	1990	1996	1983	1990	1996	1983	1990	1996	1983	1990	1996	1983	1990	1996
gender															
women	0,92	1,02	0,99	0,75**	0,81**	0,83**	1,06	1,02	0,97	1,24	1,05	0,69**	0,91	1,41**	1,49**
nationality															
non-German	1,11**	1,06	1,23**	0,88**	0,93	0,97	0,95	1,16	1,26	0,87	1,35*	1,51**	1,72**	1,14	1,44**
age															
missing	1,18*	1,21**	1,50**	1,09	0,87	0,98	0,92	0,80	1,11	0,99	1,32	0,95	1,67**	2,40**	3,19**
Up to 25 years	1,57**	1,69**	1,65**	1,57**	1,44**	1,35**	1,38**	1,49*	1,67**	2,42**	1,32	0,75	1,50**	2,56**	2,71**
26-35 years	1,24**	1,29**	1,36**	1,23**	1,04	1,18**	1,18*	1,12	1,25**	1,42**	1,13	1,13	1,27**	2,08**	1,98**
36-45 years	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.
46-55 years	1,05	0,94	0,94	0,90	0,66**	0,82**	0,98	0,99	0,85	1,67*	2,26*	1,44**	1,15	1,18	1,00
55-62 years	2,07**	2,26**	1,78**	0,78	0,60*	0,73	0,83	1,67**	0,87	3,87**	9,32**	3,99**	4,95**	5,16**	3,56**
branche															
Agriculture & mining	1,13	1,19	2,18**	1,46	1,04	1,86*	1,01	1,70	3,35**	0,47*	0,51	0,71	1,18	1,42**	2,61**
Basic industry	1,24*	1,00	1,12	1,12	1,19	1,06	1,49*	1,06	1,12	1,23	0,84	1,28	1,13	0,82	1,07
Investment goods	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.
Consumption goods	1,39**	1,11*	1,22**	1,57**	1,20**	1,11	1,55**	1,00	1,32	1,05	1,22	1,57	1,21	1,05	1,05
Food	1,46**	1,18*	1,25*	1,79**	1,39*	1,26	1,66**	1,41	1,04	1,23	0,65*	1,13	1,03	1,03	1,50**
Construction	2,20**	1,28**	1,97**	2,26**	1,39**	1,63**	2,77**	1,65**	3,13**	1,64**	0,53**	1,16	1,80**	1,19	1,84**
Retail	1,60**	1,35**	1,53**	2,29**	1,90**	1,74**	1,36**	0,95	1,19	1,27**	0,72	0,97	1,46**	1,25**	1,79**
Transport & communication	1,29**	1,56**	1,60**	1,74**	2,17**	2,04**	0,88	1,05	1,27	0,70*	0,50**	1,11	1,60*	1,57**	1,58*
Production related services	1,48**	1,62**	1,87**	2,14**	2,11**	2,31**	1,06	1,22	1,71**	1,29	0,74*	0,96	1,44**	1,66**	1,96**
Household related services	2,15**	1,92**	2,03**	2,68**	2,33**	1,89**	1,76**	1,67**	1,71**	1,27	0,89	1,47	2,45**	1,98**	2,70**
public services	1,01	1,08	1,49**	1,68**	1,31**	1,37*	0,70**	1,12	1,24**	0,43**	0,53*	1,76**	1,06	1,02	1,62**
previous events															
Unemployment	1,22**	1,10*	1,09**	0,85**	0,84*	0,81**	1,97**	2,20**	1,98**	1,63**	1,43**	1,80**	0,90	0,92	0,74**
Registration gap	1,24**	1,19**	1,16**	0,90*	0,99	0,92	1,21*	1,14	1,01	1,41**	1,55**	1,58**	1,68**	1,46**	1,45**
Firm change	1,00	1,03	0,94	1,27*	1,10	1,25**	0,95	0,90	0,79**	1,25	0,88	0,78	0,82*	1,06	0,88*
Change of occupation	1,01	1,08**	1,09	1,03	1,22**	1,05	1,07	1,10	1,23**	1,16	1,17	1,27*	0,89	0,88**	0,99
Macro indicators															
Unemployment rate	1,00	1,00	1,00**	0,95**	0,98*	1,01	1,03	1,03	1,00	1,14**	1,17**	1,00**	0,97**	0,97**	1,00
Growth of GDP	1,03	1,42**	0,62	1,07	1,50**	0,52	1,01	1,30**	0,55	1,13	1,37**	0,50	1,02	1,45**	0,75
N	9.356	8.463	7.118	9.356	8.463	7.118	9.356	8.463	7.118	9.356	8.463	7.118	9.356	8.463	7.118
Transitions	4.255	4.125	3.577	1.275	1.711	1.190	1.253	792	803	419	332	479	1.272	1.276	1.092
Pseudo-R ²	0,007	0,006	0,007	0,009	0,009	0,009	0,016	0,014	0,020	0,031	0,035	0,023	0,019	0,018	0,026

source: IAB-Employment Subsample (own calculations) * p <= 0,05 / ** p <= 0,01

table 4: Hazard Ratios for job transitions (tenure ≥ 5 years), unskilled, West Germany

	destination states														
	1983	all 1990	1996	firm change			short term unemploy.			long term unemploy.			registration gap		
	1983	1990	1996	1983	1990	1996	1983	1990	1996	1983	1990	1996	1983	1990	1996
gender															
women	1,13**	1,24**	1,23**	0,87**	0,95	0,92	1,32**	1,29**	0,95	1,32**	1,27**	1,24**	1,16**	1,43**	1,59**
nationality															
non-German	1,51**	1,07**	1,15**	0,86**	0,92	1,05	1,59**	1,44**	1,22**	1,36**	1,14*	1,45**	1,92**	1,07	1,11**
age															
missing	1,80**	2,19**	2,79**	0,94	0,67**	0,74**	0,94	1,09	0,93	1,43**	2,87**	1,39*	3,35**	5,34**	9,00**
Up to 25 years	1,85**	2,23**	2,23**	0,98	1,63**	1,34	2,62**	1,84**	1,68	2,00**	1,48	1,59	2,00**	3,90**	4,61**
26-35 years	1,28**	1,67**	1,34**	1,23**	1,33**	1,11**	1,41**	1,30**	1,20**	1,47**	1,19	1,02	1,15	2,67**	2,04**
36-45 years	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.
46-55 years	1,17**	1,09*	1,09**	0,83**	0,73**	0,90**	0,86**	0,74**	0,83*	1,78**	2,33**	2,03**	1,53**	1,49**	1,30**
55-62 years	5,16**	4,87**	3,20**	0,66**	0,56**	0,67**	2,09**	2,18**	1,66**	7,11**	16,8**	7,82**	11,6**	10,6**	7,49**
branche															
Agriculture & mining	1,27**	0,97	1,60**	1,08	1,45**	2,74**	1,00	0,61**	1,06	0,32**	0,29**	0,65*	1,82**	1,26	1,35**
Basic industry	1,06*	0,94	1,25**	0,93	1,09	1,57**	1,19	0,91	1,32	1,22	0,86	1,27	1,02	0,92*	1,01
Investment goods	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.
Consumption goods	1,26**	1,06*	1,14**	1,48**	1,41**	1,00	1,59**	1,47**	1,73**	1,25	0,79**	1,33**	1,09**	0,97	1,01
Food	1,10	0,89	1,09	1,23	1,33	1,12	1,23	1,28	1,36*	0,81	0,49**	1,11	1,10*	0,86	0,98
Construction	1,55**	0,83**	1,58**	1,64**	1,19	1,36**	3,59**	1,20	4,26**	0,82	0,42**	1,36**	1,09*	0,84**	1,16**
Retail	1,28**	0,99	1,26**	1,97**	1,93**	1,56**	1,30**	0,99	1,63**	0,96	0,42**	0,91	1,14*	0,95	1,14*
Transport & communication	1,06	0,98	1,30**	1,95**	1,75**	1,58*	0,50**	0,48**	1,13	0,26**	0,17**	0,96	1,18*	1,29**	1,31*
Production related services	0,91	0,86*	1,27**	1,22	1,41**	1,57**	0,60**	0,56**	0,89	0,32**	0,21**	0,68**	1,12*	1,10	1,41**
Household related services	1,41**	1,03	1,28**	1,73**	1,51**	1,21*	1,28	0,83	1,97**	1,04	0,43**	0,75	1,47**	1,22*	1,34**
Social services	0,90	0,75**	1,01	1,40*	1,10	1,34*	0,26**	0,38**	0,65**	0,23**	0,14**	0,31**	1,15**	1,07	1,18**
previous events															
Change of occupation	1,05	1,03	1,00	1,02	0,98	1,04	0,99	1,01	0,97	1,33**	1,18**	1,01	1,02	1,01	0,97
Macro indicators															
Unemployment rate	1,03**	1,00	1,02*	1,03	0,97*	1,01	1,05*	1,04*	1,00	1,15**	1,07*	1,10**	0,99	0,99	1,02
Growth of GDP	1,03	1,43**	0,66**	1,01	1,53**	0,74**	1,03	1,35**	0,69**	1,10	1,47**	0,60**	1,04	1,41**	0,62**
N	49.624	44.016	34.775	49.624	44.016	34.775	49.624	44.016	34.775	49.624	44.016	34.775	49.624	44.016	34.775
Transitions	13.453	13.904	11.835	2.586	3.491	3.391	2.155	1.255	1.321	1.680	2.479	1.754	7.014	6.663	5.364
Pseudo-R ²	0,019	0,019	0,013	0,005	0,006	0,004	0,022	0,015	0,016	0,040	0,069	0,040	0,043	0,039	0,042

source: IAB-Employment Subsample (own calculations) * p $\leq 0,05$ / ** p $\leq 0,01$

Further on, unskilled women show the classical gender specific differences in labour market mobility compared to men: (a) Women have lower chances for immediate firm changes, and (b) for women job stability is higher in the short run but lower in the long run. Despite these classical findings, unskilled women show a decreasing risk of unemployment and an increasing risk of transitions out of the labour force in the course of time. With regard to unskilled foreign workers no clear picture can be drawn. If at all we find an increasing long term unemployment risk at least for foreign employees with high elapsed tenure.

To be employed in the public service sector protects unskilled employees from unemployment. This is especially true for employees with five or more years of elapsed tenure. But this protection seems partly to erode between the beginning of the 1980s and the end of the 1990s. Thus, in the course of time public service sector employees with one up to two years of elapsed tenure have to face increasing long term unemployment risks. That means that for this group there is no significant difference between employees in the public service sector and the manufacturing industry at the end of the 1990s anymore. This could be an effect of the growing importance of temporary employment especially within public employment promotion schemes.

Taking a look on employees in other sectors and with regard to jobs with an elapsed tenure up to six months we can find rising job stability in the branches “trade”, “transportation and communication services” as well as in “household related services”. However, surprisingly there are only low branch specific differences if we look on unskilled employees with higher tenure. In addition no remarkable branch specific differences can be found if we concentrate on transitions to long term unemployment. To summarise we can finally say that throughout the whole investigation period service sector jobs provide significantly higher chances for immediate firm changes as well as lower unemployment risks compared to jobs in manufacturing industry.

4 Conclusion

The starting point of the paper was the overriding assumption that even in the segment of unskilled work the importance of human capital and particularly the importance of soft skills has risen during the last decades, what means that the unskilled are no homogeneous group (anymore?). This implies that we should find some signs of growing polarisation of employment chances and risks within the group of the unskilled in the course of time. And since the data we use does not contain any information about the

individual amount of soft skills we should try to identify which individual characteristics increase or decrease the employment chances and risks of formally unskilled workers instead.

As suggested we really find clear evidence for a growing polarisation of employment chances and risks within the group of unskilled workers. Although the labour market situation for the unskilled has generally worsen and their transition out of existing jobs has grown in the course of time a remarkably high and even increasing fluctuation *into new jobs* can be observed at the end of the 1990s. The fact that there is a considerable share of unskilled workers who is successfully searching for a new job at the end of the 1990s makes unambiguously clear that some of the unskilled are (still) marketable in service society. This finding is strengthened through the estimations of our competing risk transition rate models. A comparison of the transition propensity of unskilled workers out of an existing job leads both to growing long term unemployment risks as well as to growing chances for immediate firm changes between the early 1980s and the late 1990s. Since the latter implies some kind of marketability this results definitely confirm the suggestion of an increasing polarisation within the group of the unskilled.

However, even if there is a certain share of unskilled workers who are still marketable in service society we must not forget the possible dark side of this finding. The increasing propensity for some groups of unskilled employees to face immediate firm changes rather than transitions into unemployment is not only an indicator for individual marketability but at the same time an indicator that within coordinated market economies the social toll of relatively high wages could be paid through a decline in job stability and job security (c.f. Maurin and Postel-Vinay 2005). There is no doubt that shrinking job stability could have a negative impact on both individual well being as well as on social wealth on a macro level. However, the point the paper wants to stress is that the homogeneous characterisation of unskilled labour as labour markets' fallow field (especially in a coordinated market economy like Germany) is much too superficial. Hence, it is not the aim of the paper to deny possible individual negative effects caused by shrinking job stability but to highlight the possible potential of 'unskilled' work in service societies' labour markets.

The intention of the presented analyses was not only to provide evidence for a general polarisation of employment chances and risks within the group of unskilled workers but rather to get more information on the impact of individual characteristics on the marketability of unskilled employees. But unfortunately it was not really possible to identify

individual characteristics that are clearly indicating which subgroup of unskilled employees could be described as (marketable) winners and which subgroup could be described as (non-marketable) losers of the transformation to service society. Hence, we have to recognise that beside some unquestionable advantages the used IABES data is obviously a too rough instrument to investigate into this question in greater detail. Further quantitative as well as qualitative research is needed to get a deeper inside into the in-group polarisation of employment chances and risks of unskilled workers in service society. If at all we just can say that younger employees as well as employees in service sector jobs rather seem to have improved their situation in the course of time. Hence, if service sector employment is the key to increasing employment chances of unskilled workers and if service sector jobs require not only formal qualifications but also important informal soft skills, policy makers should discuss how the soft skill abilities of unskilled could generally be improved. Further on policy makers should increase their efforts to stimulate training participation especially of older unskilled workers.

In a broader sense the presented findings also call the common neoclassical diagnosis into question that the high rate of unskilled unemployment in Germany would be mainly caused by high wages and wage compression. Cutting down wages and growing wage gaps would be only simple adaptations of isolated elements of liberal employment regimes (like the US or the UK) with doubtful success in a coordinated employment regime like Germany. Instead one should better focus on institutional complementarities and, therefore stress the competitive advantages of Germany as a coordinated market economy over liberal market economies in fields like the production of high quality “medium tech” consumption and investment goods (Hall and Gingerich 2004). The production of high quality “medium tech” goods as well as of diversified high quality services acquires a qualified labour force – even in the segment of ‘unskilled’ labour (c.f. Freeman and Schettkat 2001). Therefore, more efforts have to be made to increase the employability especially of unskilled workers by providing not only vocational qualifications but also by improving their informal soft skills.

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Appendix

Unskilled employees, labour market mobility and temporary agency work

In section 2.2 fluctuation rates of unskilled employees were presented (figure 1). As mentioned there, we decided to drop all employees working in ‘production related services’ (PRS) to avoid biased results because of the strong influence of unskilled temporary agency workers on the overall fluctuation especially in the second half of the 1990s. With regard to our descriptive analysis in section 2.2 we decided to drop all employees working in PRS because it is on the one hand not possible to definitely identify temporary agency workers within our data set. On the other hand most temporary agency workers will be working in PRS since in the IABES employment in temporary employment agencies were recorded under the heading of this branch.

Figure 2: *Share of unskilled employees working in the branch ‘production related services’ (PRS) by most common occupational groups, West Germany 1976 to 2001*

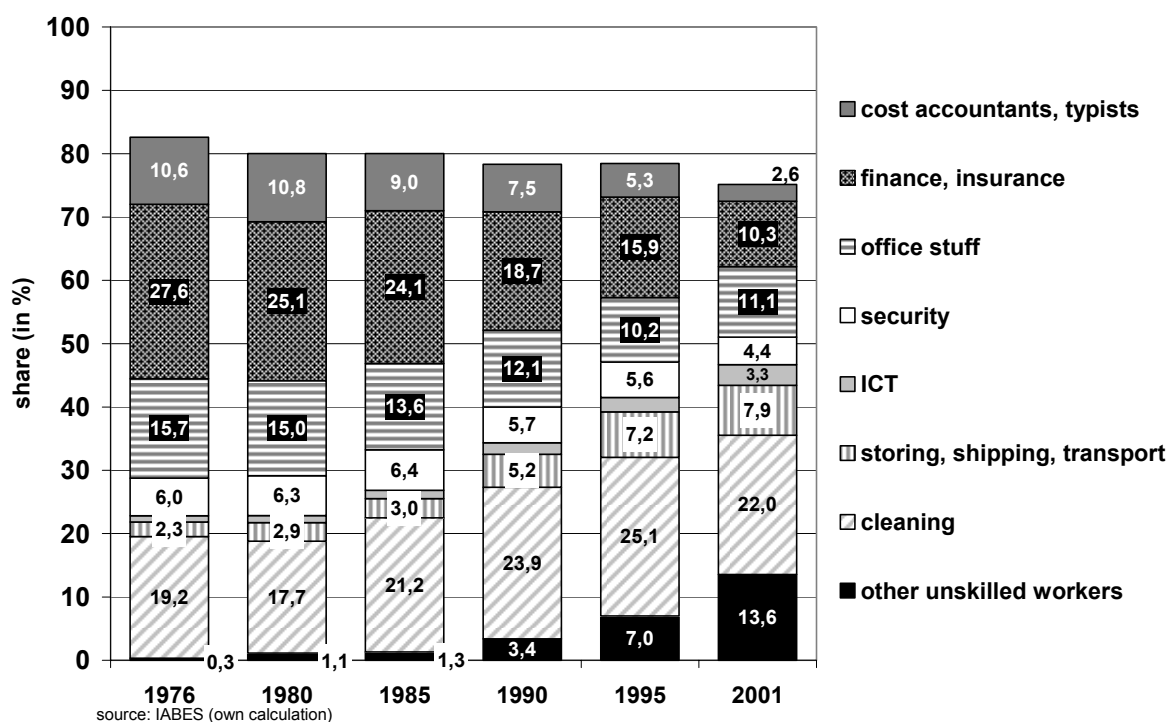


Figure 2 show the distribution of the most common occupations held by unskilled employees in PRS. During the years 1976 to 2001 approximately between 75 and 80 percent of all unskilled employees of PRS were working in only eight occupational groups, that are ‘(1) cost accounts, typists’, ‘(2) finance, insurance’, ‘(3) office stuff’, ‘(4) security’, ‘(5) ICT’, ‘(6) storing, shipping, transport’, ‘(7) cleaning’ and ‘(8) (undefined) other unskilled workers’. Between 1976 and 2001 the share of unskilled employees of

PRS working, for instance, as ‘cost accountants or typists’ have shrunk from 10.6 to 2.6 percent. This reduction can be explained by the triumph of personal computers and word processing software whereby most (unskilled) typists have become redundant in the course of time. This example represents one small facet of the strong impact technological changes have had especially on unskilled workers during the last decades. However, according to the subject of our analyses another point is of decisive importance that is the extraordinary growth of the share of undefined ‘other unskilled workers’ (OUW). In 1976 only 0.3 percent of all unskilled employees in PRS have worked in this occupational category whereas 25 years later this share has risen to 13.6 percent. It is very likely that behind this category especially temporary agency workers were hidden since for temporary agencies as employers it is relatively hard to define a concrete occupation especially for there unskilled employees and, therefore, they should classify them within our register data simply as OUWs.

The particularity of PRS with regard to unskilled employees becomes obvious if we take a look on table 5. Whereas all other branches have faced a noticeable decrease in the number of unskilled employees between 1976 and 2001 (e.g. a reduction of more than 60 percent in ‘agriculture and mining’ or in ‘production of consumption goods’) PRS has increased the number of their unskilled employees about almost 50 percent.

Table 5: Evolution of the number of unskilled employees (index: 1976 = 100) by branch, West Germany 1976 to 2001

	1980	1985	1990	1995	2001
agricultur & mining	93,8	78,7	68,6	55,7	39,8
basic industry	93,6	73,7	65,4	48,3	37,3
investment goods	98,9	83,4	81,1	55,6	48,1
consumtion goods	98,1	72,9	66,9	48,0	36,0
food	94,3	78,2	77,5	69,1	54,8
construction	101,1	73,0	67,7	69,6	44,2
retailing	99,2	78,5	77,2	70,9	63,2
transport & communication	99,6	82,7	80,3	68,9	65,4
production related services	104,0	99,2	113,3	116,8	149,8
household related services	97,4	87,9	87,5	81,9	76,6
public services	101,0	95,3	92,0	85,3	72,0

source: IABES (own calculation)

This vast employment growth in PRS is accompanied by a strong increase in fluctuation in and out of employment. As an example table 6 shows the evolution of entry rates of unskilled employees by branch. Again PRS shows an extraordinary trend with fulminant increasing entry rates from 37.9 percent in 1976 to 103.4 percent in 2001 making it

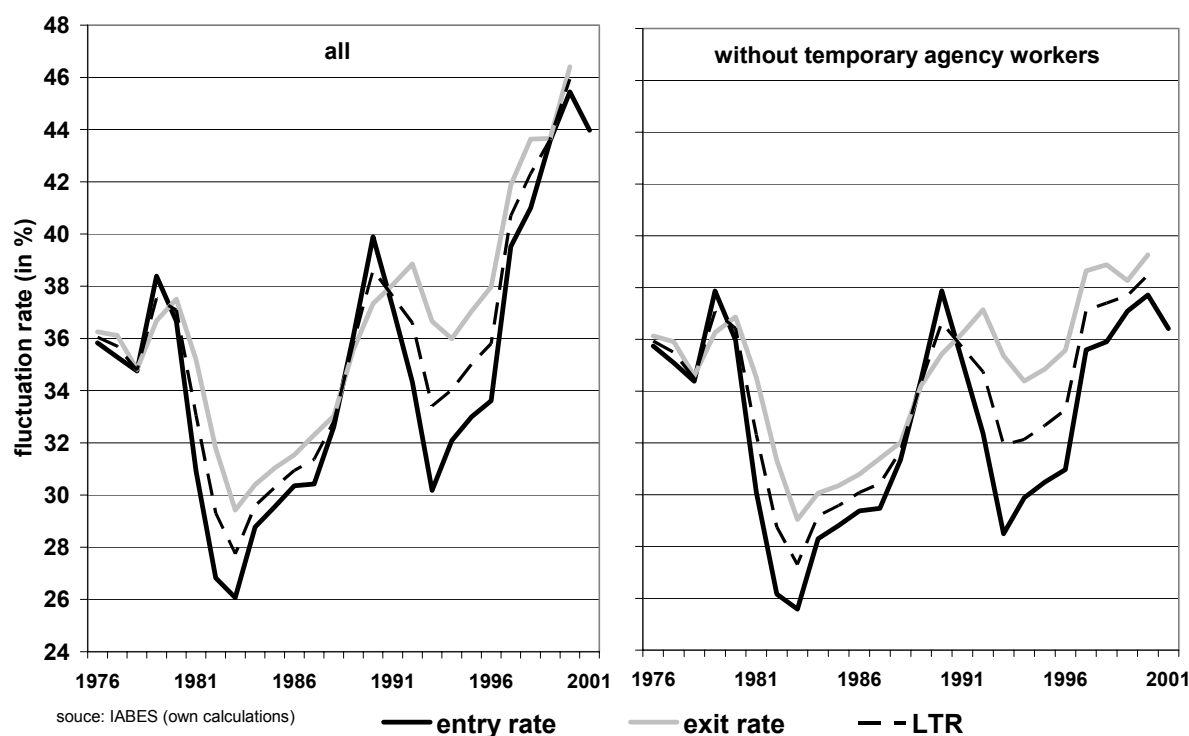
by far the most volatile branch for unskilled labour at the end of our investigation period.

Table 6: *Evolution of entry rates of unskilled employees by branch, West Germany 1976 to 2001*

	1976	1980	1985	1990	1995	2001
agricultur & mining	34,6	41,5	37,6	39,2	39,3	62,3
basic industry	26,3	26,1	21,6	27,3	21,6	22,6
investment goods	26,1	25,0	21,3	26,3	20,3	22,2
consumtion goods	33,8	30,4	23,3	33,1	22,5	24,2
food	41,9	47,1	33,6	55,2	34,9	39,1
construction	68,8	62,4	54,7	58,5	54,4	47,9
retailing	48,7	52,7	35,2	57,3	37,6	46,0
transport & communication	34,6	39,0	27,7	44,9	39,6	50,9
production related services	37,9	51,5	43,5	71,4	63,8	103,4
household related services	81,6	78,0	65,6	73,1	61,6	71,7
public services	25,4	28,7	24,8	30,5	26,6	37,1

source: IABES (own calculation)

Figure 3: *Entry-, Exit- and Labour-Turnover-Rates (LTR) of unskilled employees, all branches (left side) and all branches except 'temporary agency workers', West Germany 1976 to 2001*



Based on the presented figures and tables in the appendix it can be suggested that the impact of PSW and, hence, of temporary agency workers on the general evolution of fluctuation in the segment of unskilled labour is very strong although the total unskilled employment share of PRS is only about 10 percent in 2001. Figure 3 compares the fluctuation rate of unskilled labour with and without taking PRS into account. On the right

side of figure 3 the fluctuation rate without PSW (or without ‘temporary agency workers’) is shown as it has already been presented in section 2.1 (see figure 1 again). On the left side of figure 3 you can see the overall fluctuation rates of unskilled labour. It becomes obvious that the overall fluctuation of unskilled labour is heavily influenced by PSW employees especially during the second half of the 1990s. Thus, the decision to drop PSW from the main descriptive analysis in section 2.1 should be justified to get a much more unbiased picture of the general evolution of labour market mobility of unskilled employees.