

# Low-wage careers: are there dead-end firms and dead-end jobs?

International Workshop on  
Career Success – Approaches from  
Economics and Psychology

Nuremberg, December 3-4, 2009

Alexander Mosthaf (IAB)

Claus Schnabel (University of  
Erlangen-Nuremberg)

Jens Stephani (IAB)

# Agenda

1. Motivation and background
2. Data and study design
3. Descriptive results
4. Regression analysis of the upward mobility of low-wage workers
5. Findings and conclusions

# 1. Motivation and background I

- Common international definition of low wage: earnings less than 2/3 of the median wage
- Expansion of the German low-wage sector since the 1990s (see, e.g., Rhein/ Stamm 2006, Bosch/Kalina 2008)
- 2005: 3.6 m full-time employees received low wage (18%)
- Are low-wage jobs a transitory or a persistent experience?
- Are there individual or firm characteristics that hamper upward wage mobility?

# 1. Motivation and background II

- A number of international studies on upward mobility of low-wage workers (e.g. European Commission 2004, Uhlendorff 2006)
- Individual characteristics well investigated, but relatively few information on the impact of workplace and firm characteristics
- Firm size and sector matter (e.g. Andersson/Holzer/Lane 2005, Schank/Schnabel/Stephani 2009)
- Three types of firms for Danish low-wage earners (Bolvig 2005)
- *Are there dead-end firms and jobs for German low-wage earners?*

## 2. Data and study design I

- BA Employment Panel (BAP) 1998-2003, linked with data from the Integrated Employment Biographies (IEB) and data by the Federal Employment Agency
- Cross-section analysis (June 30th every year)
- Restricted to low-wage workers aged 15 to 64 who are employed full-time
- Exclusion of apprentices, trainees, working students, retired persons

## 2. Data and study design II

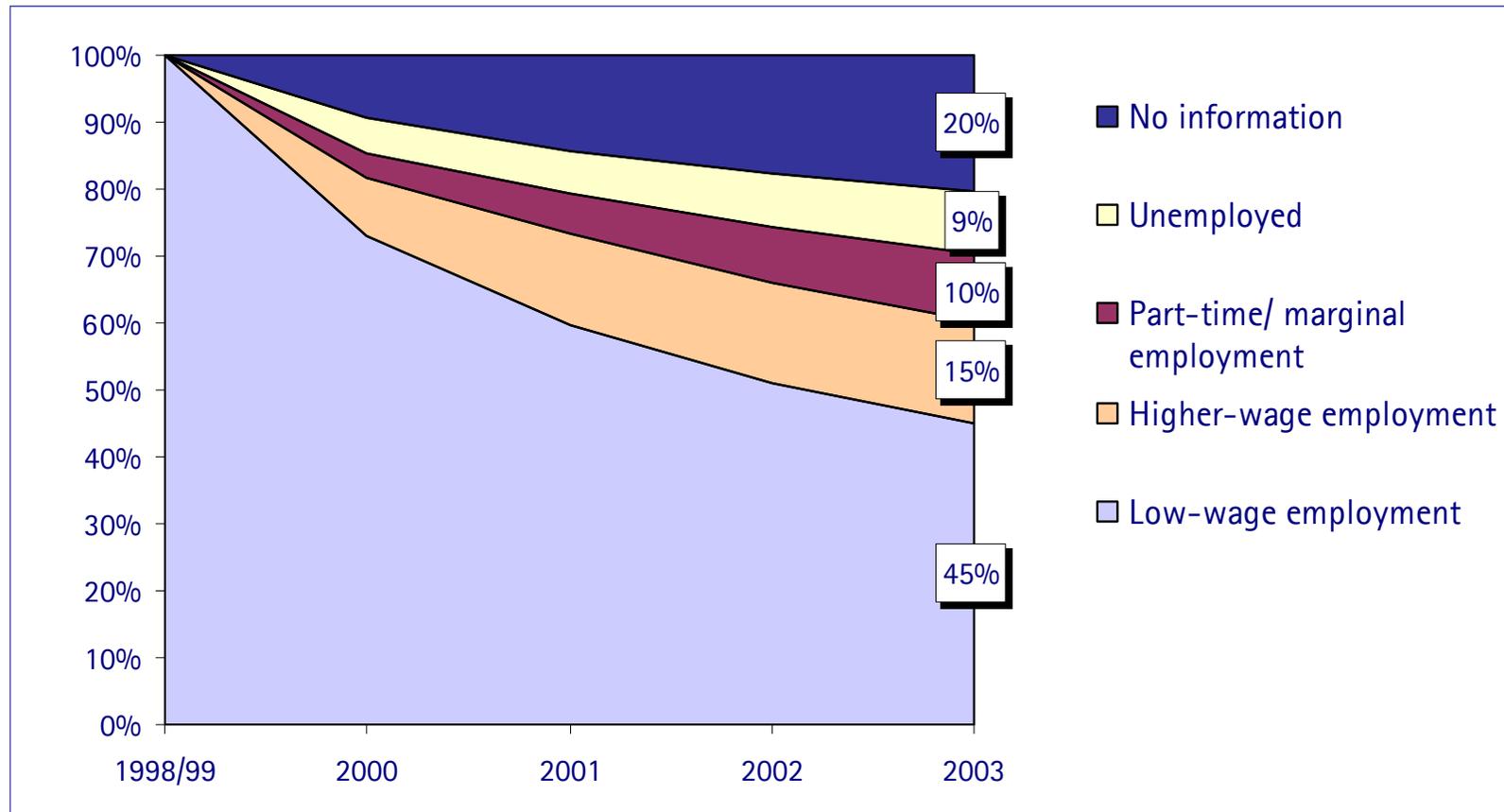
- Low-wage threshold:  $\frac{2}{3}$  of the median monthly gross wage, computed separately for West Germany and East Germany
- Behaviour of low-wage threshold 1998-2003:  
West Germany: € 1546-1740, East Germany: € 1179-1293
- Focus on the 28,184 workers who were employed full-time in both starting years 1998/99 and received a low wage at that time („multi-year low-wage workers“)
- Analysis of individual, plant and occupational factors (focus lies on the latter two)

### 3. Composition of the low-wage worker group 1998/99 in the BA Employment Panel (BAP)

Low-wage workers (1998/99)	
Number of observations	28,184
Sex	
Men	27.22%
Women	72.78%
Age (years)	
15-24	13.80%
25-34	27.66%
35-49	43.37%
50-57	15.17%
Level of education	
School leaving certificate without vocational training	19.17%
Secondary school certificate with vocational training	61.39%
High school certificate with vocational training	1.25%
University degree	0.64%
Unknown	17.56%
Type of occupation	
Unskilled manual occupations	18.85%
Skilled manual occupations	12.49%
Unskilled services	20.93%
Skilled services	12.95%
Unskilled commercial and administrative occupations	15.53%
Skilled commercial and administrative occupations	16.62%
Semi-professions	2.28%
Unknown	0.33%
Nationality	
German	90.03%
Foreign	9.97%
Plant size	
1-20 employees	58.43%
21-100 employees	24.91%
101-500 employees	13.72%
More than 500 employees	2.93%
Share of low-paid workers in the plant	
Less than 5%	3.39%
5%-40%	22.32%
40%-80%	34.27%
80%-100%	39.70%
Unknown	0.32%

Note: Low-wage workers are defined as full-time employees earning less than two-thirds of the median wage in two subsequent years (1998/99); total number N=28,184.

### 3. Employment status of the 1998/99 low-wage workers in 2000-2003



Legend: 45% of the multi-year low-wage earners of 1998/99 (100%) remained in the low-wage sector until 2003. 15% earned a higher wage in 2003, 10% were no longer full-time employed and 9% were unemployed. Total number N=28,184.

### 3. Upward mobility of low-wage workers in 2003 by individual and job characteristics

	Number of observations	Low-wage employment	Higher-wage employment
Total	16,998	75%	25%
Sex			
Men	4,694	63%	37%
Women	12,304	79%	21%
Age (years)			
15-24	2,291	54%	46%
25-34	4,507	67%	33%
35-49	7,960	81%	19%
50-57	2,240	89%	11%
Type of occupation			
Unskilled manual occupations	3,265	75%	25%
Skilled manual occupations	2,132	70%	30%
Unskilled services	3,477	77%	23%
Skilled services	2,287	77%	23%
Unskilled commercial and administrative occupations	2,518	82%	18%
Skilled commercial and administrative occupations	2,293	69%	31%
Semi-professions	347	67%	33%
Unknown	49	67%	33%
Nationality			
German	15,572	75%	25%
Foreign	1,426	70%	30%
Plant size			
1-20 employees	9,923	77%	23%
21-100 employees	4,319	73%	27%
101-500 employees	2,291	69%	31%
More than 500 employees	465	63%	37%
Share of low-paid workers in the plant			
Less than 5%	421	61%	39%
5%-40%	3,948	66%	34%
40%-80%	6,017	76%	24%
80%-100%	6,584	79%	21%
Unknown	28	68%	32%

Note: The personal and plant-level characteristics shown are from 1999. Total number N=16,998.

## 4. Regressions

- Distinction between „high-paid employment“ and „no high-paid employment“ (only) in 2000 or 2003
- Bivariate probit model controlling for initial conditions and endogenous selection (see Heckman 1981, Steward/Swaffield 1999)
  - Upward mobility equation: individual, occupational and plant characteristics (N=28,184)
  - Selection equation: in addition four identifying variables (N=237,278)
- Two samples:
  - All 1998/99 low-wage workers
  - Only 1998/99 low-wage workers still full-time employed in 2000 or 2003

## 4. Regression results

- Individual, occupational and plant characteristics play significant role for upward mobility
- Not taking into account endogenous selection would bias estimates
- Female, older and unskilled employees are less likely to leave the low-wage sector, no difference between Germans and foreigners
- Plant size, industry affiliation and share of low-wage workers play a role
- Moving to another plant and change of occupation are important

## 4. Regression results II

- Plants with high shares of women or foreigners are not dead ends
- High share of low-wage workers points to dead end plants, leaving this plants is usually associated with leaving low-wage employment
- Small plants are also often dead ends for low-wage earners
- Change of occupation is relatively successful when working in unskilled and skilled services or unskilled commercial and administrative occupations

## 5. Findings and Conclusions I

- Relevance of individual characteristics confirmed, plant characteristics indeed matter for upward mobility
- Plants with high shares of low-wage workers and small plants seem to be dead ends for low-wage earners
- Unskilled and skilled services are often dead ends, unskilled commercial and administrative occupations too
- Leaving such jobs can be an important instrument for leaving the low-wage sector
- Low-wage jobs can serve as stepping stones

## 5. Findings and Conclusions II

- Staying in the “wrong” firms could make low wage persistent
- Several research gaps left, e.g. extent and permanency of the wage rise
- The matching of employees to firms in the low-wage sector may have important and longlasting effects on the careers of this workers
- As suggested by Andersson/Holzer/Lane (2005), labour market policies that seek to improve the access of low-wage earners to higher-wage firms and occupations could have major payoffs

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