Braakmann, Nils

Working Paper

Fields of training, plant characteristics and the gender wage gap in entry wages among skilled workers: evidence from German administrative data

Working Paper Series in Economics, No. 90

Provided in Cooperation with:
Institute of Economics, Leuphana Universität Lüneburg

Suggested Citation: Braakmann, Nils (2008) : Fields of training, plant characteristics and the gender wage gap in entry wages among skilled workers: evidence from German administrative data, Working Paper Series in Economics, No. 90, Leuphana Universität Lüneburg, Institut für Volkswirtschaftslehre, Lüneburg

This Version is available at:
https://hdl.handle.net/10419/28206

WORKING PAPER

Fields of training, plant characteristics and the gender wage gap in entry wages among skilled workers – Evidence from German administrative data

by
Nils Braakmann

University of Lüneburg
Working Paper Series in Economics

No. 90

July 2008

www.leuphana.de/vwl/papers

ISSN 1860 - 5508

Fields of training, plant characteristics and the gender wage gap in entry wages among skilled workers– Evidence from German administrative data

Nils Braakmann*
Leuphana University Lüneburg

This version: July 1, 2008

Abstract

This paper investigates the gender wage gap among skilled German workers after the end of vocational training using data from social security record. Using information on worker and plant characteristics for both the training plant and the current employer, results from standard decomposition techniques show that up to 91% of an initial 14% earnings disadvantage for women in the first job can be attributed to differences in endowments. Of these, occupational segegreation explains up to two thirds of the earnings gap, with plant characteristics accounting for up to 30%.

Keywords: Gender wage gap, decomposition, field of training
JEL Classification: J24, J31, J71

*Empirical Economics, Institute of Economics, Leuphana University Lueneburg, braakmann@uni.leuphana.de, Tel.: 0049 (0) 4131 677 2303, Fax: 0049 (0) 4131 677 2026
The author would like to thank Joachim Wagner for helpful hints and overall support. All calculations were performed using Stata 10.0 SE (StataCorp 2007) using the Oaxaca-package by Ben Jann for the decompositions (see Jann 2008 for a description). All do-files are available from the author on request. The data used in this paper can be accessed via the research data center of the Federal Employment Agency in the Institute of Employment Research in Nuremberg. See http://fdz.iab.de for details.

1 Introduction

This paper considers the impact of gender specific differences in fields of training and plant characteristics during apprenticeship on the gender wage gap among German workers at the beginning of their career. Using administrative data from social security, both at an individual level and aggregated at the plant level, we are able to control for the influence of occupational segregation in training occupations as well as for the characteristics of the training plant and the current employer.

Occupational segregation during vocational training (as well as field of studies when looking at academics) might be expected to play a major role as men and women tend to chose different training occupations and these differences in education are in turn associated with different job opportunities. In fact, studies focusing on these questions – reviewed in greater detail in section 2 – typically find a major influence of either fields of studies or fields of professional training. This paper expands the earlier literature by considering detailed information on both the training plant and the current employer in addition to occupational segregation.

Our findings from standard Oaxaca-Blinder-decompositions (Blinder 1973, Oaxaca 1973) indicate that, depending of the specification, almost 92% of the difference in starting wages can be related to different fields of training and differences in characteristics of the training plant. Of these, different fields of training alone explain between 59% and 66% of the earings gap.

The rest of this paper is organized as follows: Section 2 provides a brief overview on the empirical literature concerned with differences in the content of post-school and professional education. The data and the estimation procedure is described in section 3.

Descriptive results are found in section 4, while estimation and decomposition results are presented in section 5. Section 6 concludes.

2 Previous evidence

Most of the previous studies have focused on the role differences in fields of study play for the gender wage gap among academics. The only exception to this rule is Kunze (2005) and to some degree Fitzenberger and Kunze (2005), reviewed in greater detail below. In the following short overview we consider only studies with some reference to fields of training or fields of study. Papers from the latter group dealing exclusively with pay differences in highly specialized occupations like university faculty, e.g Broder (1993) or Formby et al. (1993) are excluded. More extensive surveys on the gender wage gap can be found in Cain (1986), Altonji and Katz (1999) or in Weichselbauer and Winter-Ebmer (2005) who also conduct a meta-analysis.

In a first step, we consider the four studies currently available for Germany. Machin and Puhani (2003) compare the contribution of the subject of degrees to wage inequality between male and female university graduates in Germany and the UK in 1996. Their findings indicate that these differences explain between 8 to 20% of the overall wage gap and raise the explanatory power of wage regressions by about 24 to 30%. Note that their study differs from this one in the definition of the respective population: While they consider persons of all ages and in various states of their labor market careers, we focus on the first job in a worker's career. Consequently, we might expect the impact of different training occupations to be stronger in our study as less human capital deprecation has taken place since graduation and eventual signalling components of degrees might be more

important at the beginning of a labor market career.

Kunze (2005) uses administrative labor market data from Germany. Focusing on the first years after the end of vocational training, her findings suggest that occupational segregation explains about 50% of the male-female wage difference in entry wages and about 55% of the wage difference after 8 years. Using the same data, Fitzenberger and Kunze (2005) focus on the question whether this early segregation is migitated by occupational mobility. Their results suggest considerable lock-in effects for women in low-wage jobs. Additionally, the lesser occupational mobility of women is strongly related to differences in training occupations. Finally, these effects tend be weaker for cohorts finishing vocational training in the 1990s comapred with the cohorts of the 1970s and 1980s.

Focusing on university graduates at the beginning and five years into their labor market careers, Braakmann (2008) finds that about 74 and 78% of the earnings gap in entry wages are related to different fields of studies. Adding employer information leads to an explained share of about 90% of the earnings gap with fields of study still accounting for about half of the gap. After five to six years, fields of study still explain between 26% and 33% of a 35% earnings gap when not considering employer characteristics.

The international literature has primarily focused on the importance of college majors for the gender wage gap. Gerhart (1990) uses data from a single large firm in the US in 1986. He focuses on hires between 1976 and 1986 and controls for college majors alongside the usual human capital variables like experience and schooling. He finds that about 6-7 percentage points of an initial 11% wage penalty for women in both starting and current salaries can be explained by human capital and different college majors.

In a survey among male and female graduates in business from a specific university,

Fuller and Schoenberger (1991) find an initial 7% earnings penalty for women in starting salaries and a 14% earnings penalty later in their careers. College major and grade point average account for roughly 50 to 70 percent of the difference in starting wages. Their findings furthermore suggest a declining impact of those characteristics over time.

Controlling for high school courses and the fields of the highest degree, Brown and Corcoran (1997) find that these account for 0.08 to 0.09 of an initial 0.18 to 0.20 gap in log earnings in 1986. They also find some evidence that men profit more from taking typical "male" majors than women.

Using data for Finish university graduates over the first 11 years of their careers, Napari (2006a) finds that between 8 and 11% of the gender wage gap can be related to differences in the field of studies. He also finds that men are more clustered in technology oriented fields, while women are more likely to be found in education science, the humanities, health and welfare and the social sciences (including business). Finally, in a related paper, Napari (2006b), using a different sample, finds large contributions of differences in fields of studies for both labor market entrants and more experiences workers. For new entrants, differences in fields explain between 20 and 39% of the gender wage gap for graduates with a Bachelor and between 27 and 35% for those with a Master's degree. Using data on more experienced workers, the respective shares are between 20 and 30% for those with a Bachelor's degree and between 18 and 23% for those with a Master's degree.

Overall, the evidence suggests that both fields of study or the occupation learned during vocational training are an important factor when looking at the gender wage gap among graduates. Furthermore, the impact seems to be strongest shortly after graduation and declining over time.

3 Data and empirical approach

The data used in this study comes from the so called employment panel of the Federal Employment Agency (*BA- Beschäftigtenpanel*). Specific information on an earlier version of the employment panel can be found in Koch and Meinken (2004), the current version is described (in German) in Schmucker and Seth (2006). The individual data originates from social security information and is collected in the so called *employee history* by the Federal Employment Agency.[1] In Germany, employers are obliged by German law to deliver annual information on their employees, as well as additional information at the beginning and end of an employment, to social security. These notifications are used to calculate pensions, as well as contributions to and benefits from health and unemployment insurance. The resulting spell data covers approximately 75 - 80% of the German workforce, excluding freelancers, own-acount self-employed, civil servants and family workers (Koch and Meinken 2004, p. 317). It contains information on the begin and end of employment, daily wages, a person's age and sex, as well as several variables collected for statistical purposes, e.g. education or nationality.

From these files the employment panel is drawn in a two step procedure. First, all persons born on on of seven specified dates are selected. As the German social security number is tied to the date of birth and does not change over time, it is possible to track those persons over time. Additionally, entries in and exits from the labor force are automatically covered by this procedure as new entrants born on one of these dates replace persons leaving the labor force. In a second step, the panel is formed by drawing four cross-sections per year – on the last day of March, June, September and December respectively – from this

[1] More information on person-level data from German social security records can be found in Bender at al. (2000).

data. If a person receives unemployment benefits or is in an active labor market program on one of those days, an artificial observation indicating this fact is generated from other data sources of the Federal Employment Agency. Finally, the data is merged with employer information that is generated by aggregating all person level records from the original data at the plant level. The resulting panel is unbalanced due to entries into and exits from employment. However, there is no missing information due to non-response.

We use data from 1998 to 2003 when a new industry classification was introduced and restrict the sample to those individuals who finish vocational training during this period. Apart from that, we make no further restrictions to the estimations sample leading to a sample size of 15,994 men and 15,189 women.

In a first step, we estimate standard wage regressions in two different models with and without characteristics of the first employer after vocational training where (log) gross monthly wages (in 2000 prices) are regressed on dummy variables for the relevant fields of vocational training and a number of variables for personal and plant characteristics. The separate consideration of (current) employer characteristics is worthwhile since these are not always identical to the training plant.

While training occupations cannot be identified directly, the three-digit occupation the respective individual works in during vocational training is available in the data. As these are usually identical (or at least very similar) to the training occupation, they can be used as a reasonable proxy. As additional right hand side variables on the individual level, we include age (including a squared term) and a dummy variable indicating whether higher secondary schooling (*Abitur*) was completed. On the plant level, we use, for both the training plant and the current employer, plantsize, three digit industries, the age structure of the workforce measured by the shares of workers in five year age intervals, the educational

structure of the workforce by the shares of workers with a certain school and post school education and the shares of women, Germans, trainees, part-time workers, skilled and unskilled blue and white collar workers respectively.

In a second step, we rely on standard Oaxaca-Blinder-Decompositions to identify the part of the raw wage differential explained by differences in the covariates and the part of the differential unexplained by these observable differences. As usual, we focus on the explained part of the differential as the unexplained part might be due to genuine differences in the (structural) coefficients as well as due to differences in unobservables. We also rely on the usual practice of using both the female and the male coefficients as weights for the decomposition.

4 Descriptives

Consider the descriptive comparisons in table 1. As almost all difference are significant on conventional levels due to the large sample size, we will focus on variables where we also observe a difference that is economically large. Note first that there is a 200€ or approximately 14% difference in monthly earnings in advantage for men. Turning to socio-demographic characteristics, one notices that women tend to be slightly better educated than men with about 6% more having completed higher secondary schooling. The overall low shares of individuals with higher secondary schooling are not uncommon for Germany, where lower secondary schooling and vocational training are the most common combination. Differences in training occupations will be discussed below.

(Table 1 about here.)

Now consider differences in characteristics of the respective training plant. Here, men tend to be trained in bigger plants and in plants with higher shares of blue-collar workers, whereas women tend to work alongside a higher share of part-time and white collar workers. For both sexes, a high degree of segregation by gender can be observed: Women are trained in primarily female plants while the opposite can be observed for men. Similar differences are found for the characteristics of the current employer.

Figure 1 displays the distribution of the (aggregated) training occupations by gender. Note first that the vast majority of individuals is clustered in a few occupations. Furthermore, we observe large differences between the sexes: While men are more likely to be found in technical occupations, women tend to cluster in sales, service or health occupations.

(Figure 1 about here.)

Overall, the descriptive evidence suggests several potential reasons for the observed wage difference as men and women do not only tend to chose different training occupations, but also are trained in different plants and work for different employers.

5 Results

Turning to results of the econometric investigation, consider first the wage regression results displayed in table 2 and focus on differences between the sexes. Beginning with the estimates excluding information on the current employer, we notice that the impact of the socio-demographic characteristics is similar between men and women: While the completion of higher secondary schooling yields an earnings advantage of about 4% to 5%, no such effect existes for the age at the end of training.

(Table 2 about here.)

Looking at the characteristics of the training plant, we generally observe no large differences between men and women: Firmsize is associated with a significant, though negligible small positive effect on wages, while a higher share of women and Germans is associated with relatively similar negative wage effects. The age structure of the plant seems to influence wages, though single coefficients are hard to interpret. However, there are again no large deviations between men and women. Differences can be observed for the variables describing the distribution of occupational positions in a plant: The share of workers with a university degree, the shares of untrained workers with or without higher schooling and the share of trained workers without higher schooling which are all associated positively with male wages while no such effect exists for females. Taken together, the variables explain between 48% and 55% percent of the variation in wages which is rather high for simple cross section regressions.

Turning to the estimation results including information on the current employer, we observe some changes in the magnitude of the coefficients for the socio-demographic characteristics, especially in the returns of having completed higher secondary schooling. The lower coefficient on that variable compared with the results from the model without current employer characteristics suggests that part of the returns of higher school education runs through enabling higher educated persons to work in firms with a higher earnings potential. For the characteristics of the training plant, we generally find similar though smaller and consequently sometimes insignificant effects when adding current employer characteristics. Note that this is not surprising as apprentices tend to stay in their training plant which leads to some degree of correlation between the characteristics of the training plant and the current employer. For the characteristics of the current employer we find that most results

are similar to those for the corresponding characteristics of the training plant. The main exception is the age structure of the plant which does not seem to matter when looking at the current employer's characteristics.

Now, consider the decomposition results for the entry wages displayed in table 3. Focus first on the overall results shown in the top panel. The overall wage difference at labor market entry is 0.13 in log earnings. Of these, between 0.10 and 0.12 or between 81% and 92% can be explained through differences in observables in the models without employer characteristics. Including those into the decomposition does not change the overall results much.

(Table 3 about here.)

Turning to the detailed decomposition results, we see that differences in training occupations explain between 59% and 66% of the overall wage gap which is similar to the results found by Kunze (2005). Other socio-demographics observed in the data seem to be relatively unimportant. Characteristics of the training plant explain between 6% and 30% of the earnings gap. Looking at the more detailed decomposition, one notices that differences in the workforce structure and the location in the German *Länder* work in favor for women, while differences in industries and especially the share of women in the plant tend to widen the gender wage gap.

Adding information on the current employer does not add much if using the male coefficients as weights, but explains another 0.03 or 22% of the female earnings disadvantage when weighting endowment differences with the female coefficients. However, regardless of the weights employed, we find that differences in employer location narrow the gender wage gap by about 10%. Similar to the findings for the training plant, differences in the share

of women account for about 25% of the male earnings advantage. When using the male coefficients as weights, we see that differences in the current employer's industry narrow the gap by almost 25%. Using the female coefficients as weights, this effect does not exist.

Taken together, this evidence suggests that men and women do not only tend to chose different training occupations, but additionally work in very different plants. Taken together, these factors explain between 81% and 92% of the observed earnings differences in entry wages. This result is similar to those found by Braakmann (2008) who focussed on entry wage differences among German academics. Additionally, it suggests that much of the gender wage gap is in fact related to observed differences between men and women. Note, however, that taking these results as a sign for the non-existence of labor market discrimination would be wrong as both training occupations and training plants as well as current employers might be influenced by discrimination. However, these results suggest that the questions, why women tend to choose training occupations that ultimately lead to lower paid jobs and why women work in firms with less favorable characteristics might be worth answering. Additionally, one should be aware that all problems commonly associated with children and children related fragmented work biographies were not present in our sample due to the low age of the subjects. In fact, the results for academics by Braakmann (2008) suggest that the factors shaping the gender wage in the beginning of labor market careers might be different from the factors shaping later earnings differences.

6 Conclusion

This paper considered the importance of different fields of studies for the gender wage gap at labor market entry among skilled workers in Germany. We used a representative data set

from social security records for the years 1998 to 2003 that contained detailed information on occupational segregation during vocational training as well as one characteristics of the training plant and the current employer.

Our results from standard Oaxaca-Blinder-decompositions indicate that between 81% and 92% of the 200€ (or 14%) difference found in starting wages can be explained by differences in endowments, not considering characteristics of the current employer. Of these, occupational segregation in training occupations plays a dominant role, solely explaining between 59 and 64% of the earnings gap. A further 27% to 30% can be related to differences in the training plants. Adding information on the current employer leads to 77% to 91% of the gap being explained by differences in observables with occupational segregation accounting for 65% to 66%. Here, the characteristics of the training plant explain between 6% and 23% of the earnings ggap, with current employer's characteristics accounting for another 6% to 22%. The results on the importance of fields of studies are largely consistent with the (sparse) empirical literature on this subject.

On a political level, these results provide some support for the idea that initiatives trying to bring women into typically male occupations might be beneficial in lowering male-female wage inequality. What remains an open question though are the reasons that cause women to chose different and apparently worse-paid occupations than men. These differences might in principle reflect genuine differences in preferences for topics or employment opportunities. However, they may also be related to anticipated discrimination in typical men's fields. As far as preferences are formed e.g. during childhood and youth they might also be related to expectations of the youth's environment about the "proper" behavior of a women. Resolving this question, however, is left for future research. Additionally, given the rather large role plant characteristics play for the gender wage gap,

the question why women do not only chose worse-paid jobs, but also select themselves in plants with less favorable earnings prospects, seems worth answering.

7 References

1. Altonji, Joseph G. and Rebecca M. Blank, **1999**: "Race and gender in the labor market". In Orley Ashenfelter and David. Card (eds), *Handbook of Labor Economics*, Vol. 3C. Amsterdam: North-Holland, pp. 3143-3259.

2. Bender, Stefan, Anette Haas and Christoph Klose, **2000**: "The IAB Employment Subsample 1975-1995", *Schmollers Jahrbuch / Journal of Applied Social Science Studies 120(4)*: 649-662.

3. Blinder, Alan S., **1973**" "Wage Discrimination: Reduced Forms and Structural Estimates", *Journal of Human Resources 8(4)*, pp. 436-455.

4. Braakmann, Nils, **2008**: "Non scholae, sed vitae discimus! – The importance of fields of study for the gender wage gap among German university graduates during labor market entry and the first years of their careers", *University of Lüneburg Working Paper in Economics No. 85.*

5. Broder, Ivy E., **1993**: "Professional achievements and gender differences among academic economists", *Economic Inquiry 31(1)*, pp. 116-127.

6. Brown, Charles and Mary Corcoran, **1997**: "Sex-based differences in school content and the male-female wage gap", *Journal of Labor Economics 15(3)*, pp. 431-465.

7. Cain, Glen G., **1986**: "The economic analysis of labor market discrimination: A survey". In Orley Ashenfelter and Richard Layard (eds), *Handbook of Labor Economics*,

Vol 1. Amsterdam: North-Holland, pp. 693-785.

8. Fitzenberger, Bernd and Astrid Kunze, **2005**: "Vocational training and gender: wages and occupational mobility among young workers", *Oxford Review of Economic Policy 21(3)*, pp. 392-415.

9. Formby, John P., William D. Gunther and Ryoichi Sakano, **1993**: "Entry level salaries of academic economists: Does gender or age matter?", *Economic Inquiry 31(1)*, pp. 128-138.

10. Fuller, Rex and Richard Schoenberger, **1991**: "The gender salary gap: Do academic achievement, internship experience, and college major make a difference?", *Social Science Quarterly 72(4)*, pp. 715-726.

11. Gerhart, Barry, **1990**: "Gender differences in current and starting salaries: The role of performance, college major and job title", *Industrial and Labor Relations Review 43(4)*, pp. 418-433.

12. Jann, Ben, **2008**: "A Stata implementation of the Blinder-Oaxaca decomposition", *ETH Zurich Sociology Working Paper No. 5.*

13. Koch, Iris and Holger Meinken, **2004**: "The Employment Panel of the German Federal Employment Agency", *Schmollers Jahrbuch / Journal of Applied Social Science Studies 124(2)*: 315-325.

14. Kunze, Astrid, **2005**: "The evolution of the gender wage gap", *Labour Economics 12(1)*, pp.73-97.

15. Machin, Stephen and Patrick Puhani, **2003**: "Subject of degree and the gender wage differential: evidence from the UK and Germany", *Economics Letters 79(3)*, pp.

393-400.

16. Napari, Sami, **2006a**: "The early career gender wage gap", *CEP Discussion Paper No 738*, Centre for Economic Performance, London.

17. Napari, Sami, **2006b**: "Type of education and the gender wage gap", *Helsinki Center of Economic Research Discussion Papers No. 128*, Helsinki.

18. Oaxaca, Ronald, **1973**: "Male-Female Wage Differentials in Urban Labor Markets", *International Economic Review 14(3)*, pp. 693-709.

19. Schmucker, Alexandra and Stefan Seth, **2006**: "BA-Beschäftigtenpanel 1998-2006, Codebuch", *FDZ Datenreport 1/2008*, Nuremberg.

20. Weichselbaumer, Doris and Rudolf Winter-Ebmer, **2005**: "A meta-analysis of the international gender wage gap", *Journal of Economic Surveys 19(3)*, pp. 479-511.

8 Tables

Table 1: Descriptive statistics

Variable	Women		Men		P-Value
	Mean	Std.dev.	Mean	Std.dev.	
Log real wage	7.32	.3187	7.45	.2924	.0000
Monthly gross labor income (€, 2000 prices)	1590.33	461.13	1795.22	472.43	.0000
Socio-demographics					
Age at end of training (years)	20.77	1.6661	20.56	1.72	.0000
Higher secondary schooling (1 = yes)	.1442	.3514	.0804	.2719	.0000
Training plant					
Plantsize	572.95	2587.66	879.36	4015.94	.0000
Share of Germans	.9502	.0866	.9467	.0852	.0003
Share of blue collar workers, non-skilled	.0734	.1311	.1174	.1626	.0000
Share of blue collar workers, skilled	.1060	.1717	.2820	.2309	.0000
Share of white collar workers	.4096	.2512	.2836	.2341	.0000
Share of part-time workers, <18 hrs/week	.0840	.1275	.0492	.0938	.0000
Share of part-time workers, >=18 hrs/week	.1112	.1371	.0509	.0923	.0000
Share of workers with college/university degree	.0618	.1020	.0502	.0879	.0000
Share of trainees, interns	.2067	.2046	.1933	.1935	.0000
Share of trained workers, higher schooling	.0451	.0872	.0312	.0626	.0000
Share of trained workers, lower schooling	.6021	.2200	.6292	.2062	.0000
Share of untrained workers, higher schooling	.0309	.0797	.0203	.0558	.0000
Share of untrained workers, lower schooling	.2555	.2182	.2672	.2052	.0000
Share of women	.6766	.2658	.2831	.2265	.0000
Share of workers age 20-24	.1751	.1549	.1469	.1318	.0000
Share of workers age 25-29	.1124	.0911	.0997	.0794	.0000
Share of workers age 30-34	.1222	.0857	.1269	.0820	.0000
Share of workers age 35-39	.1231	.0852	.1296	.0795	.0000
Share of workers age 40-44	.1074	.0791	.1125	.0730	.0000
Share of workers age 45-49	.0911	.0739	.0951	.0685	.0000
Share of workers age 50-54	.0711	.0645	.0758	.0617	.0000
Share of workers age 55-59	.0553	.0578	.0597	.0576	.0000
Share of workers age 60-64	.0226	.0383	.0247	.0384	.0000
Share of workers age <20	.1111	.1434	.1213	.1432	.0000
Share of workers age >65	.0094	.0326	.0085	.0282	.0101
Current Employer					
Plantsize	558.20	2615.12	831.51	3934.72	.0000
Share of Germans	.9476	.0881	.9437	.0883	.0001
Share of blue collar workers, non-skilled	.0849	.1507	.1412	.1906	.0000
Share of blue collar workers, skilled	.1232	.2041	.3382	.2695	.0000
Share of white collar workers	.4804	.2740	.3005	.2569	.0000
Share of part-time workers, <18 hrs/week	.0888	.1295	.0522	.0991	.0000
Share of part-time workers, >=18 hrs/week	.1190	.1517	.0520	.0969	.0000
Share of workers with college/university degree	.0619	.1023	.0488	.0867	.0000
Share of trainees, interns	.0946	.1081	.0932	.1006	.2144
Share of trained workers, higher schooling	.0550	.1053	.0354	.0737	.0000
Share of trained workers, lower schooling	.6972	.1926	.7185	.1783	.0000
Share of untrained workers, higher schooling	.0212	.0477	.0148	.0380	.0000
Share of untrained workers, lower schooling	.1647	.1518	.1825	.1524	.0000
Share of women	.6734	.2650	.2778	.2264	.0000
Share of workers age <20	.0970	.1288	.0999	.1248	.0444
Share of workers age 20-24	.1672	.1467	.1470	.1335	.0000
Share of workers age 25-29	.1181	.0913	.1059	.0832	.0000
Share of workers age 30-34	.1288	.0869	.1308	.0825	.0331
Share of workers age 35-39	.1266	.0836	.1337	.0791	.0000
Share of workers age 40-44	.1109	.0787	.1158	.0744	.0000
Share of workers age 45-49	.0922	.0720	.0978	.0709	.0000
Share of workers age 50-54	.0718	.0643	.0769	.0632	.0000
Share of workers age 55-59	.0550	.0589	.0592	.0603	.0000
Share of workers age 60-64	.0228	.0383	.0245	.0375	.0001
Share of workers age >65	.0094	.0316	.0086	.0280	.0102
No. of Obs.	15,994		15,189		

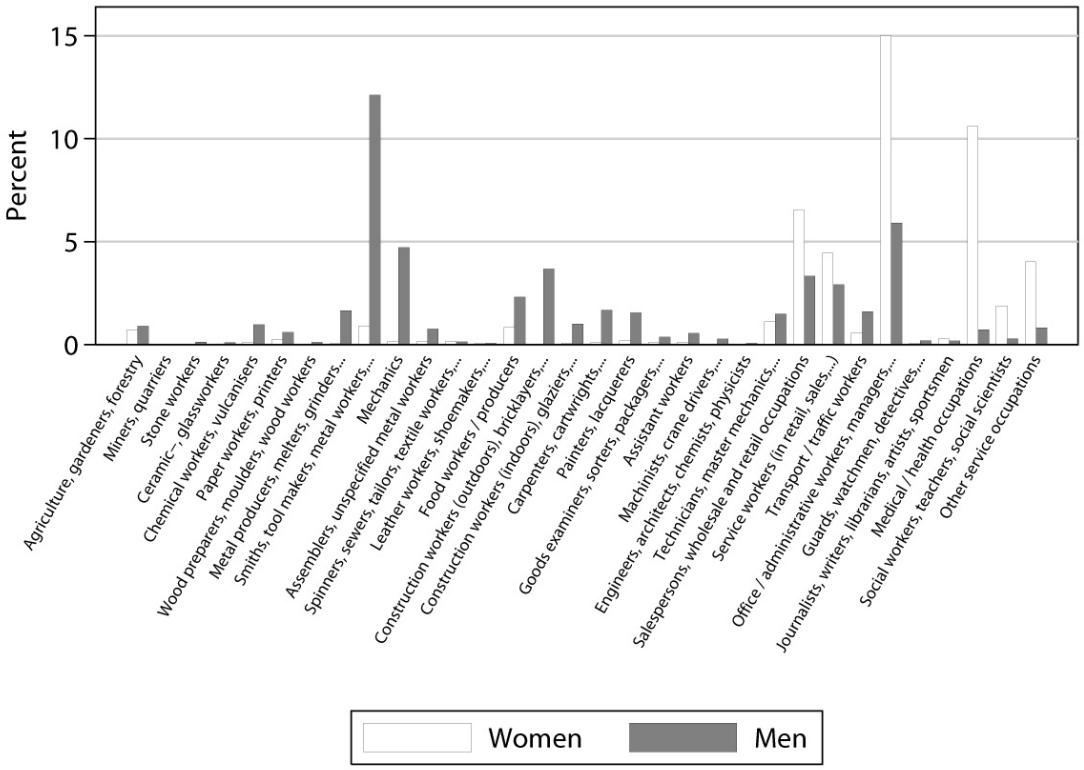

FIGURE 1: Distribution of training occupations by gender

TABLE 2: WAGE REGRESSIONS, DEPENDENT VARIABLE: LOG GROSS LABOR EARNINGS PER MONTH

	Excluding current employer's characteristics		Including current employer's characteristics	
	Men	Women	Men	Women
SOCIO-DEMOGRAPHICS				
Higher secondary schooling (1 = yes)	0.0431***	0.0495***	0.0268**	0.0329***
	(0.0090)	(0.0061)	(0.0096)	(0.0062)
Age at end of training (years)	0.0343	0.0364	0.0271	0.0607*
	(0.0255)	(0.0269)	(0.0261)	(0.0268)
Age at end of training (squared)	-0.0006	-0.0006	-0.0004	-0.0012+
	(0.0006)	(0.0006)	(0.0006)	(0.0006)
Occupation fixed effects (three digit)	(included)	(included)	(included)	(included)
TRAINING PLANT				
Plantsize	0.0000***	0.0000***	0.0000	0.0000
	(0.0000)	(0.0000)	(0.0000)	(0.0000)
Share of Germans	-0.0830***	-0.0672*	-0.0613	-0.0481
	(0.0251)	(0.0273)	(0.0394)	(0.0347)
Share of women	-0.1020***	-0.1206***	-0.0374	-0.0655***
	(0.0176)	(0.0161)	(0.0246)	(0.0198)
Share of workers age <20	-0.3787*	-0.2774*	-0.2656+	-0.2108
	(0.1512)	(0.1303)	(0.1512)	(0.1366)
Share of workers age 20-24	-0.4449**	-0.3267*	-0.3176*	-0.2272+
	(0.1500)	(0.1314)	(0.1509)	(0.1368)
Share of workers age 25-29	-0.4497**	-0.2621*	-0.4108**	-0.2106
	(0.1518)	(0.1298)	(0.1531)	(0.1359)
Share of workers age 30-34	-0.3497*	-0.1783	-0.3806*	-0.1850
	(0.1501)	(0.1312)	(0.1521)	(0.1365)
Share of workers age 35-39	-0.3154*	-0.2279+	-0.3540*	-0.2504+
	(0.1511)	(0.1302)	(0.1532)	(0.1360)
Share of workers age 40-44	-0.3220*	-0.3127*	-0.3721*	-0.3073*
	(0.1505)	(0.1315)	(0.1504)	(0.1385)
Share of workers age 45-49	-0.3807*	-0.2898*	-0.4039**	-0.3065*
	(0.1514)	(0.1317)	(0.1537)	(0.1378)
Share of workers age 50-54	-0.3441*	-0.2567+	-0.4362**	-0.3239*
	(0.1521)	(0.1331)	(0.1557)	(0.1386)
Share of workers age 55-59	-0.3054*	-0.2125	-0.2951+	-0.2848*
	(0.1512)	(0.1344)	(0.1530)	(0.1413)
Share of workers age 60-64	-0.4574**	-0.2653*	-0.5068**	-0.2597+
	(0.1581)	(0.1350)	(0.1686)	(0.1462)
Share of workers age >65	-0.5223**	-0.3348*	-0.5260**	-0.3666*
	(0.1680)	(0.1412)	(0.1887)	(0.1516)
Share of trainees, interns	-0.1181*	-0.0901	-0.1233+	-0.1067
	(0.0554)	(0.0826)	(0.0652)	(0.1142)
Share of blue collar workers, non-skiled	0.0036	-0.0353	0.0155	-0.0193
	(0.0460)	(0.0774)	(0.0582)	(0.1101)
Share of blue collar workers, skilled	0.0028	-0.0520	-0.0373	-0.0674
	(0.0449)	(0.0758)	(0.0556)	(0.1081)
Share of white collar workers	0.0703	0.0529	0.0090	-0.0116
	(0.0450)	(0.0753)	(0.0575)	(0.1083)
Share of part-time workers, <18 hrs/week	-0.0428	-0.0668	0.0576	-0.0027
	(0.0517)	(0.0782)	(0.0680)	(0.1105)
Share of part-time workers, >=18 hrs/week	0.0639	0.0726	0.1337+	0.1458
	(0.0527)	(0.0767)	(0.0714)	(0.1098)
Share of untrained workers, lower schooling	0.1336**	-0.0041	0.0850	-0.0185
	(0.0492)	(0.0364)	(0.0538)	(0.0337)
Share of trained workers, lower schooling	0.1135*	0.0005	0.1332*	0.0208
	(0.0500)	(0.0362)	(0.0540)	(0.0339)
Share of untrained workers, higher schooling	0.3919***	0.0375	0.2374**	-0.0175
	(0.0699)	(0.0506)	(0.0811)	(0.0502)
Share of trained workers, higher schooling	0.0541	-0.0231	-0.0175	-0.0015
	(0.0687)	(0.0455)	(0.0854)	(0.0489)
Share of workers with college/university degree	0.2591***	0.0729+	0.0705	-0.0257
	(0.0573)	(0.0427)	(0.0687)	(0.0457)
Industry fixed effects (three digit)	(included)	(included)	(included)	(included)
CURRENT EMPLOYER				
Plantsize			0.0000	0.0000*
			(0.0000)	(0.0000)
Share of Germans			0.0027	-0.0068
			(0.0406)	(0.0368)
Share of women			-0.0894***	-0.0740***
			(0.0255)	(0.0193)
Share of workers age <20			-0.1502*	-0.1406*
			(0.0588)	(0.0661)
Share of workers age 20-24			-0.1360*	-0.2066**
			(0.0557)	(0.0649)
Share of workers age 25-29			-0.0268	-0.1049
			(0.0599)	(0.0663)
Share of workers age 30-34			0.0713	-0.0003
			(0.0604)	(0.0667)
Share of workers age 35-39			0.0784	0.0130
			(0.0613)	(0.0677)
Share of workers age 40-44			0.0537	-0.0575
			(0.0628)	(0.0671)
Share of workers age 45-49			0.0524	0.0239

Continued on next page

Table 2 – continued from previous page

	Excluding current employer's characteristics		Including current employer's characteristics	
	Men	Women	Men	Women
			(0.0630)	(0.0692)
Share of workers age 50-54			0.1270+	0.0633
			(0.0728)	(0.0726)
Share of workers age 55-59			0.0000	0.0446
			–	(0.0811)
Share of workers age 60-64			0.0793	0.0000
			(0.0968)	.
Share of workers age >65			0.0153	-0.0089
			(0.1384)	(0.0969)
Share of trainees, interns			-0.0995	0.0638
			(0.0683)	(0.1165)
Share of blue collar workers, non-skilled			-0.0566	0.0072
			(0.0549)	(0.1122)
Share of blue collar workers, skilled			0.0273	0.0502
			(0.0527)	(0.1117)
Share of white collar workers			0.0554	0.1099
			(0.0545)	(0.1118)
Share of part-time workers, <18 hrs/week			-0.1296*	-0.0679
			(0.0630)	(0.1129)
Share of part-time workers, >=18 hrs/week			-0.0938	-0.0775
			(0.0685)	(0.1130)
Share of untrained workers, lower schooling			-0.9279*	1.8675
			(0.3873)	(1.7364)
Share of trained workers, lower schooling			-1.0567**	1.7682
			(0.3867)	(1.7356)
Share of untrained workers, higher schooling			-0.8494*	1.9721
			(0.3958)	(1.7350)
Share of trained workers, higher schooling			-0.9036*	1.8140
			(0.3889)	(1.7341)
Share of workers with college/university degree			-0.8137*	1.9499
			(0.3890)	(1.7360)
Industry fixed effects (three digit)	(–)	(included)	(–)	(included)
Year dummies	(included)	(included)	(included)	(included)
Regional dummies (German *Länder*)	(included)	(included)	(included)	(included)
Constant	7.5361***	7.5750***	8.7737***	5.2316**
	(0.3627)	(0.3255)	(0.5196)	(1.8273)
No. of Obs.	15,994	15,189	14,973	14,747
R^2	0.4754	0.5530	0.5241	0.6003

Coefficients, robust standard errors in parentheses.
***/**/*/+ denote significance on the 0.1%, 1%, 5% and 10% level respectively.

Table 3: Decomposition results: endowment effect, Oaxaca-Blinder-Decomposition, wages at labor market entry

	Weighted by male coefficients		Weighted by female coefficients	
	Firm characteristics		Firm characteristics	
	excluded	included	excluded	included
Differential				
Women	7.3248***	7.3226***	7.3248***	7.3226***
	(0.0026)	(0.0027)	(0.0026)	(0.0027)
Men	7.4538***	7.4493***	7.4538***	7.4493***
	(0.0023)	(0.0024)	(0.0023)	(0.0024)
Raw Difference	-0.1290***	-0.1266***	-0.1290***	-0.1266***
	(0.0035)	(0.0036)	(0.0035)	(0.0036)
Total Explained	-0.1046**	-0.0980***	-0.1190***	-0.1146***
	(0.0334)	(0.0230)	(0.0116)	(0.0119)
Total Unexplained	-0.0243	-0.0286	-0.0100	-0.0120
	(0.0334)	(0.0230)	(0.0116)	(0.0119)
Detailed decomposition				
Higher secondary schooling (1 = yes)	0.0032***	0.0020***	0.0028***	0.0016**
	(0.0004)	(0.0004)	(0.0005)	(0.0005)
Age at end of training (years)	0.0075	0.0124*	0.0071	0.0055
	(0.0051)	(0.0051)	(0.0049)	(0.0049)
Age at end of training (squared)	-0.0053	-0.0098*	-0.0047	-0.0032
	(0.0049)	(0.0048)	(0.0046)	(0.0046)
Occupations	-0.0758*	-0.0808***	-0.0851***	-0.0826***
	(0.0343)	(0.0232)	(0.0128)	(0.0139)
Training plant:	-0.0343***	-0.0297***	-.0390***	-.0077
	(0.0055)	(0.0077)	(0.0078)	(0.0101)
Plantsize	-0.0013***	-0.0005	-0.0009***	-0.0004
	(0.0003)	(0.0006)	(0.0002)	(0.0006)
Age structure	-0.0022***	0.0012+	-0.0040***	0.0001
	(0.0006)	(0.0007)	(0.0007)	(0.0008)
Workforce structure	0.0182***	0.0186***	0.0090*	0.0155***
	(0.0037)	(0.0043)	(0.0035)	(0.0045)
Educational structure	0.0010+	-0.0008	0.0033***	-0.0015
	(0.0005)	(0.0006)	(0.0007)	(0.0009)
Location (German *Länder*)	0.0076***	-0.0008	0.0095***	0.0017+
	(0.0010)	(0.0007)	(0.0012)	(0.0009)
Industry	-0.0098+	-0.0213**	-0.0155*	-0.0082
	(0.0060)	(0.0080)	(0.0074)	(0.0094)
Share of Germans	-0.0002*	-0.0002	-0.0003*	-0.0002
	(0.0001)	(0.0001)	(0.0001)	(0.0001)
Share of women	-0.0475***	-0.0258***	-0.0401***	-0.0147+
	(0.0056)	(0.0069)	(0.0062)	(0.0085)
Current employer:		0.0077		-0.0284*
		(0.0087)		(0.0117)
Plantsize (current employer)		-0.0009+		-0.0004
		(0.0005)		(0.0006)
Age structure		-0.0052***		-0.0043***
		(0.0007)		(0.0007)
Workforce structure		0.0011		-0.0038
		(0.0045)		(0.0050)
Educational structure		0.0029***		0.0051***
		(0.0008)		(0.0011)
Location (German *Länder*)		0.0116***		0.0104***
		(0.0013)		(0.0015)
Industry		0.0276**		-0.0001
		(0.0086)		(0.0108)
Share of Germans		-0.0000		0.0000
		(0.0001)		(0.0001)
Share of women		-0.0293***		-0.0354***
		(0.0070)		(0.0084)
Year	0.0001	0.0002	-0.0000	0.0001
	(0.0002)	(0.0003)	(0.0002)	(0.0002)

***/**/*/+ denote significance on the 0.1%, 1%, 5% and 10% level respectively. Negative signs denote an advantage for men.

Working Paper Series in Economics

(see www.leuphana.de/vwl/papers for a complete list)

No.89: *Alexander Vogel:* Exports productivity in the German business services sector: First evidence from the Turnover Tax Statistics panel, July 2008

No.88: *Joachim Wagner:* Improvements and future challenges for the research infrastructure in the field *Firm Level Data*, June 2008

No.87: *Markus Groth:* A review of the German mandatory deposit for one-way drinks packaging and drinks packaging taxes in Europe, June 2008

No.86: *Heike Wetzel:* European railway deregulation. The influence of regulatory ans environmental conditions on efficiency, May 2008

No.85: *Nils Braakmann:* Non scholae, sed vitae discimus! - The importance of fields of study for the gender wage gap among German university graduates during market entry and the first years of their careers, May 2008

No.84: *Markus Groth:* Private ex-ante transaction costs for repeated biodiversity conservation auctions: A case study, May 2008

No.83: *Jan Kranich:* R&D and the agglomeration of industries, April 2008

No.82: *Alexander Vogel:* Zur Exporttätigkeit unternehmensnaher Dienstleister in Niedersachsen - Erste Ergebnisse zu Export und Produktivität auf Basis des Umsatzsteuerstatistikpanels, April 2008

No.81: *Joachim Wagner:* Exporte und Firmenerfolg: Welche Firmen profitieren wie vom internationalen Handel?, März 2008

No.80: *Stefan Baumgärtner:* Managing increasing environmental risks through agro-biodiversity and agri-environmental policies, March 2008

No.79: *Thomas Huth:* Die Quantitätstheorie des Geldes – Eine keynesianische Reformulierung, März 2008

No.78: *Markus Groth:* An empirical examination of repeated auctions for biodiversity conservation contracts, March 2008

No.77: *Nils Braakmann:* Intra-firm wage inequality and firm performance – First evidence from German linked employer-employee-data, February 2008

No.76: *Markus Groth*: Perspektiven der Nutzung von Methanhydraten als Energieträger – Eine Bestandsaufnahme, Februar 2008

No.75: *Stefan Baumgärtner, Christian Becker, Karin Frank, Birgit Müller & Christian Quaas:* Relating the philosophy and practice of ecological economics. The role of concepts, models, and case studies in inter- and transdisciplinary sustainability research, January 2008

No.74: *Thorsten Schank, Claus Schnabel & Joachim Wagner:* Higher wages in exporting firms: Self-selection, export effect, or both? First evidence from German linked employer-employee data, January 2008

No.73: *Institut für Volkswirtschaftslehre:* Forschungsbericht 2007, Januar 2008

No.72: *Christian Growitsch and Heike Wetzel:Testing for* economies of scope in European railways: An efficiency analysis, December 2007
[revised version of Working Paper No. 29,
forthcoming in: Journal of Transport Economics and Policy]

No.71: *Joachim Wagner, Lena Koller and Claus Schnabel:* Sind mittelständische Betriebe der Jobmotor der deutschen Wirtschaft?, Dezember 2007
[publiziert in: Wirtschftsdienst 88 (2008), 2, 130-135]

No.70: *Nils Braakmann:* Islamistic terror, the war on Iraq and the job prospects of Arab men in Britain: Does a country's direct involvement matter?, December 2007

No.69: *Maik Heinemann:* E-stability and stability learning in models with asymmetric information, December 2007

No.68: *Joachim Wagner:* Exporte und Produktivität in Industriebetrieben – Niedersachsen im interregionalen und internationalen Vergleich, Dezember 2007

No.67: *Stefan Baumgärtner and Martin F. Quaas:* Ecological-economic viability as a criterion of strong sustainability under uncertainty, November 2007

No.66: *Kathrin Michael:* Überbrückungsgeld und Existenzgründungszuschuss – Ergebnisse einer schriftlichen Befragung drei Jahre nach Gründungsbeginn, November 2007

No.65: *The International Study Group on Export and Productivity:* Exports and Productivity – Comparable Evidence for 14 Countries, November 2007

No.64: *Lena Koller, Claus Schnabel und Joachim Wagner:* Freistellung von Betriebsräten – Eine Beschäftigungsbremse?, November 2007
[erscheint in: Zeitschrift für Arbeitsmarktforschung, Heft 2/3 2008]

No.63: *Anne-Kathrin Last:* The Monetary Value of Cultural Goods: A Contingent Valuation Study of the Municipal Supply of Cultural Goods in Lueneburg, Germany, October 2007

No.62: *Thomas Wein und Heike Wetzel:* The Difficulty to Behave as a (regulated) Natural Monopolist – The Dynamics of Electricity Network Access Charges in Germany 2002 to 2005, September 2007

No.61: *Stefan Baumgärtner und Martin F. Quaas:* Agro-biodiversity as natural insurance and the development of financial insurance markets, September 2007

No.60: *Stefan Bender, Joachim Wagner, Markus Zwick:* KombiFiD - Kombinierte Firmendaten für Deutschland, September 2007

No.59: *Jan Kranich*: Too much R&D? - Vertical differentiation in a model of monopolistic competition, August 2007

No.58: *Christian Papilloud und Ingrid Ott:* Convergence or mediation? Experts of vulnerability and the vulnerability of experts' discourses on nanotechnologies – a case study, July 2007
[published in: European Journal of Social Science Research 21 (2008), 1, 41-64]

No.57: *Ingrid Ott und Susanne Soretz:* Governmental activity, integration and agglomeration, July 2007
[published in: ICFAI Journal of Managerial Economics 5 (2008), 2, 28-47]

No.56: *Nils Braakmann:* Struktur und Erfolg von Ich-AG-Gründungen: Ergebnisse einer Umfrage im Arbeitsagenturbezirk Lüneburg, Juli 2007
[revidierte Fassung erscheint in: Richter, J., Schöning, S. & Wetzel, H., Mittelstand 2008. Aktuelle Forschungsbeiträge zu gesellschaftlichen und finanzwirtschaftlichen Herausforderungen, Frankfurt am Main: Peter Lang, 2008]

No.55: *Nils Braakmann:* Differences in the earnings distribution of self- and dependent employed German men – evidence from a quantile regression decomposition analysis, July 2007

No.54: *Joachim Waagner:* Export entry, export exit, and productivity in German Manufacturing Industries, June 2007
[published in: International Journal of the Economics of Business 15 (2008), 2, 169-180]

No.53: *Nils Braakmann:* Wirkungen der Beschäftigungspflicht schwerbehinderter Arbeitnehmer – Erkenntnisse aus der Einführung des „Gesetzes zur Bekämpfung der Arbeitslosigkeit Schwerbehinderter", Juni 2007
[revidierte Fassung erscheint in: Zeitschrift für Arbeitsmarktforschung/ Journal for Labour Market Research 41 (2008),1]

No.52: *Jan Kranich und Ingrid Ott:* Regionale Spitzentechnologie auf internationalen Märkten, Juni 2007
[erscheint in: Merz, J. und Schulte, R. (Hrsg.): Neue Ansätze der MittelstandsForschung, Münster, 2007]

No.51: *Joachim Wagner:* Die Forschungspotenziale der Betriebspaneldaten des Monatsberichts im Verarbeitenden Gewerbe, Mai 2007
[erscheint in: AStA – Wirtschafts- und Sozialwirtschaftliches Archiv]

No.50: *Stefan Baumgärtner, Frank Jöst und Ralph Winkler:* Optimal dynamic scale and structure of a multi-pollution economy, May 2007

No.49: *Helmut Fryges und Joachim Wagner:* Exports and productivity growth – First evidence from a continuous treatment approach, May 2007
[forthcoming in: Review of World Economics]

No.48: *Ulrich Kaiser und Joachim Wagner:* Neue Möglichkeiten zur Nutzung vertraulicher amtlicher Personen- und Firmendaten, April 2007
[erscheint in: Perspektiven der Wirtschaftspolitik]

No.47: *Joachim Wagner:* Jobmotor Mittelstand? Arbeitsplatzdynamik und Betriebsgröße in der westdeutschen Industrie, April 2007
[publiziert in: Vierteljahrshefte zur Wirtschaftsforschung, 76 (2007), 3, 76-87]

No.46: *Christiane Clemens und Maik Heinemann:* Credit Constraints, Idiosyncratic Risks, and the Wealth Distribution in a Heterogenous Agent Model, March 2007

No.45: *Jan Kranich:* Biotechnologie und Internationalisierung. Ergebnisse der Online-Befragung, März 2007

No.44: *Joachim Wagner:* Entry, exit and productivity. Empirical results for German manufacturing industries, March 2007

No.43: *Joachim Wagner:* Productivity and Size of the Export Market Evidence for West and East German Plants, 2004, March 2007
[publiziert in: Jahrbücher für Nationalökonomie und Statistik, 227 (2007), 4, 403-408]

No.42: *Joachim Wagner:* Why more West than East German firms export, March 2007

No.41: *Joachim Wagner:* Exports and Productivity in Germany, March 2007
[publiziert in: Applied Economics Quarterly 53 (2007), 4, 353-373]

No.40: *Lena Koller, Klaus Schnabel und Joachim Wagner:* Schwellenwerte im Arbeitsrecht. Höhere Transparenz und Effizienz durch Vereinheitlichung, Februar 2007
[publiziert in: Perspektiven der Wirtschaftspolitik, 8 (2007), 3, 242-255]

No.39: *Thomas Wein und Wiebke B. Röber:* Sind ausbildende Handwerksbetriebe erfolgreicher?, Januar 2007

No.38: *Institut für Volkswirtschaft:* Forschungsbericht 2006, Januar 2007

No.37: *Nils Braakmann:* The impact of September 11th, 2001 on the job prospects of foreigners with Arab background – Evidence from German labor market data, January 2007

No.36: *Jens Korunig:* Regulierung des Netzmonopolisten durch Peak-load Pricing?, Dezember 2006

No.35: *Nils Braakmann:* Die Einführung der fachkundigen Stellungnahme bei der Ich-AG, November 2006
[erscheint in: Schulte, Reinhard: Neue Ansätze der MittelstandsForschung, Münster etc.: Lit, 2008]

No.34: *Martin F. Quaas and Stefan Baumgärtner:* Natural vs. financial insurance in the management of public-good ecosystems, October 2006
[forthcoming in: Ecological Economics]

No.33: *Stefan Baumgärtner and Martin F. Quaas:* The Private and Public Insurance Value of Conservative Biodiversity Management, October 2006

No.32: *Ingrid Ott and Christian Papilloud:* Converging institutions. Shaping the relationships between nanotechnologies, economy and society, October 2006
[published in: Bulletin of Science, Technology & Society 2007 (27), 4, 455-466]

No.31: *Claus Schnabel and Joachim Wagner:* The persistent decline in unionization in western and eastern Germany, 1980-2004: What can we learn from a decomposition analysis?, October 2006
[published in: Industrielle Beziehungen/The German Journal of Industrial Relations 14 (2007), 118-132]

No.30: *Ingrid Ott and Susanne Soretz:* Regional growth strategies: fiscal versus institutional governmental policies, September 2006
[published in: Economic Modelling 25 (1008), 605-622]

No.29: *Christian Growitsch and Heike Wetzel:* Economies of Scope in European Railways: An Efficiency Analysis, July 2006

No.28: *Thorsten Schank, Claus Schnabel and Joachim Wagner:* Do exporters really pay higher wages? First evidence from German linked employer-employee data, June 2006
[published in in: Journal of International Economics 72 (2007), 1, 52-74]

No.27: *Joachim Wagner:* Markteintritte, Marktaustritte und Produktivität
Empirische Befunde zur Dynamik in der Industrie, März 2006
[publiziert in: AStA – Wirtschafts- und Sozialwirtschaftliches Archiv 1 (2007), 3, 193-203]

No.26: *Ingrid Ott and Susanne Soretz:* Governmental activity and private capital adjustment, March 2006
[forthcoming in: Icfai Journal of Managerial Economics]

No.25: *Joachim Wagner:* International Firm Activities and Innovation:
Evidence from Knowledge Production Functions for German Firms, March 2006
[published in: The Icfai Journal of Knowledge Management VI (2008), 2, 47-62]

No.24: *Ingrid Ott und Susanne Soretz:* Nachhaltige Entwicklung durch endogene Umweltwahrnehmung, März 2006
publiziert in: Clemens, C., Heinemann, M. & Soretz, S., Auf allen Märkten zu Hause (Gedenkschrift für Franz Haslinger), Marburg: Metropolis, 2006, 233-256

No.23: *John T. Addison, Claus Schnabel, and Joachim Wagner:* The (Parlous) State of German Unions, February 2006
[published in: Journal of Labor Research 28 (2007), 3-18]

No.22: *Joachim Wagner, Thorsten Schank, Claus Schnabel, and John T. Addison:* Works Councils, Labor Productivity and Plant Heterogeneity: First Evidence from Quantile Regressions, February 2006
[published in: Jahrbücher für Nationalökonomie und Statistik 226 (2006), 505 - 518]

No.21: *Corinna Bunk:* Betriebliche Mitbestimmung vier Jahre nach der Reform des BetrVG: Ergebnisse der 2. Befragung der Mitglieder des Arbeitgeberverbandes Lüneburg Nordostniedersachsen, Februar 2006

No.20: *Jan Kranich:* The Strength of Vertical Linkages, July 2006

No.19: *Jan Kranich und Ingrid Ott:* Geographische Restrukturierung internationaler Wertschöpfungsketten – Standortentscheidungen von KMU aus regionalökonomischer Perspektive, Februar 2006
[publiziert in: Merz, J. und Schulte, R. (Hrsg.): Fortschritte in der MittelstandsForschung, Münster, 2006, 113-129]

No.18: *Thomas Wein und Wiebke B. Röber:* Handwerksreform 2004 – Rückwirkungen auf das Ausbildungsverhalten Lüneburger Handwerksbetriebe?, Februar 2006

No.17: *Wiebke B. Röber und Thomas Wein:* Mehr Wettbewerb im Handwerk durch die Handwerksreform?, Februar 2006

No.16: *Joachim Wagner:* Politikrelevante Folgerungen aus Analysen mit wirtschaftsstatistischen Einzeldaten der Amtlichen Statistik, Februar 2006
[publiziert in: Schmollers Jahrbuch 126 (2006) 359-374]

No.15: *Joachim Wagner:* Firmenalter und Firmenperformance
Empirische Befunde zu Unterschieden zwischen jungen und alten Firmen
in Deutschland, September 2005
[publiziert in: Lutz Bellmann und Joachim Wagner (Hrsg.), Betriebsdemographie (Beiträge zur Arbeitsmarkt- und Berufsforschung, Band 305), Nürnberg: IAB der BA, 83-111]

No.14: *Joachim Wagner:* German Works Councils and Productivity:
First Evidence from a Nonparametric Test, September 2005
[forthcoming in: Applied Economics Letters]

No.13: *Lena Koller, Claus Schnabel und Joachim Wagner:* Arbeitsrechtliche Schwellenwerte und betriebliche Arbeitsplatzdynamik: Eine empirische Untersuchung am Beispiel des Schwerbehindertengesetzes, August 2005
[publiziert in: Zeitschrift für ArbeitsmarktForschung/ Journal for Labour Market Research 39 (2006), 181-199]

No.12: *Claus Schnabel and Joachim Wagner:* Who are the workers who never joined a union? Empirical evidence from Germany, July 2005
[published in: Industrielle Beziehungen/ The German Journal of Industrial Relations 13 (2006), 118-131]

No.11: *Joachim Wagner:* Exporte und Produktivität in mittelständischen Betrieben
Befunde aus der niedersächsischen Industrie (1995 – 2004), June 2005
[publiziert in: Niedersächsisches Landesamt für Statistik, Statistische Berichte Niedersachsen, Sonderausgabe: Tagung der NLS am 9. März 2006, Globalisierung und regionale Wirtschaftsentwicklung - Datenlage und Datenbedarf in Niedersachsen. Hannover, Niedersächsisches Landesamt für Statistik, Juli 2006, 18 – 29]

No.10: *Joachim Wagner:* Der Noth gehorchend, nicht dem eignen Trieb.
Nascent Necessity and Opportunity Entrepreneurs in Germany.
Evidence from the Regional Entrepreneurship Monitor (REM), May 2005
[published in: RWI: Mitteilungen. Quarterly 54/ 55 (2003/04), 287-303
{published June 2006}]

No. 9: *Gabriel Desgranges and Maik Heinemann:* Strongly Rational Expectations Equilibria with Endogenous Acquisition of Information, March 2005

No. 8: *Joachim Wagner:* Exports, Foreign Direct Investment, and Productivity: Evidence from German Firm Level Data, March 2005
[published in: Applied Economics Letters 13 (2006), 347-349]

No. 7: *Thomas Wein:* Associations' Agreement and the Interest of the Network Suppliers – The Strategic Use of Structural Features, March 2005

No. 6: *Christiane Clemens and Maik Heinemann:* On the Effects of Redistribution on Growth and Entrepreneurial Risk-Taking, March 2005

No. 5: *Christiane Clemens and Maik Heinemann:* Endogenous Redistributive Cycles – An overlapping Generations Approach to Social Conflict and Cyclical Growth, March 2005

No. 4: *Joachim Wagner: Exports and Productivity:* A Survey of the Evidence from Firm Level Data, March 2005
[published in: The World Economy 30 (2007), 1, 60-82]

No. 3: *Thomas Wein and Reimund Schwarze:* Is the Market Classification of Risk Always Efficient? - Evidence from German Third Party Motor Insurance, March 2005

No. 2: *Ingrid Ott and Stephen J. Turnovsky:* Excludable and Non-Excludable Public Inputs: Consequences for Economic Growth, June 2005 (Revised version)
[published in: Economica 73 (2006), 292, 725-742
also published as CESifo Working Paper 1423]

No. 1: *Joachim Wagner:* Nascent and Infant Entrepreneurs in Germany.
Evidence from the Regional Entrepreneurship Monitor (REM), March 2005
[erschienen in: Joachim Merz, Reinhard Schulte (Hrsg.), Neue Ansätze der MittelstandsForschung, Berlin: Lit Verlag 2008, S.395-411]

Leuphana Universität Lüneburg
Institut für Volkswirtschaftslehre
Postfach 2440
D-21314 Lüneburg
Tel.: ++49 4131 677 2321
email: brodt@leuphana.de
www.leuphana.de/vwl/papers