

Braakmann, Nils

Working Paper

The role of psychological traits for the gender gap in full-time employment and wages: evidence from Germany

Working Paper Series in Economics, No. 112

Provided in Cooperation with:

Institute of Economics, Leuphana Universität Lüneburg

Suggested Citation: Braakmann, Nils (2009) : The role of psychological traits for the gender gap in full-time employment and wages: evidence from Germany, Working Paper Series in Economics, No. 112, Leuphana Universität Lüneburg, Institut für Volkswirtschaftslehre, Lüneburg

This Version is available at:

<https://hdl.handle.net/10419/28230>

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.

**Psychological traits and the gender gap
in full-time employment and wages:
Evidence from Germany**

by
Nils Braakmann

University of Lüneburg
Working Paper Series in Economics

No. 112

January 2009

www.leuphana.de/vwl/papers

ISSN 1860 - 5508

The role of psychological traits for the gender gap in full-time employment and wages: Evidence from Germany

Nils Braakmann*
Leuphana University Lüneburg

This version: January 15, 2009

Abstract

This paper shows that differences in various non-cognitive traits, specifically the “big five”, positive and negative reciprocity, locus of control and risk aversion, contribute to gender inequalities in wages and employment. Using the 2004 and 2005 waves of the German Socio-Economic Panel, evidence from regression and decomposition techniques suggests that gender differences in psychological traits are more important for inequalities in wages than in employment. Differences in the “big five”, in particular in agreeableness, conscientiousness and neuroticism matter for both wages and employment. For the latter, the results also show a large effect of differences in external locus of control.

Keywords: Gender wage gap, non-cognitive traits, decomposition

JEL Classification: J24, J31

*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 data used in this paper can be obtained from the Socio-Economic Panel Group at the DIW Berlin, see <http://www.diw.de> for details. Stata 10.1 was used in all calculations. Do-files are available from the author on request. The author would like to thank Joachim Wagner for helpful hints and overall support. All remaining errors are my own.

1 Introduction

Recent research has emphasized the role of personality and other psychological traits like risk-aversion or self-esteem for individual economics success (see Borghans, Duckworth, Heckman and ter Wel 2008 for a comprehensive overview). Two recent studies by Mueller and Plug (2006) and Fortin (2008) show that non-cognitive traits play a significant role in explaining the gender wage gap among American workers. In addition to providing evidence from a different country, this paper builds on these two studies by considering a greater number of traits, specifically the “big five”, a commonly used measure of personality, positive and negative reciprocity, locus of control and risk aversion. Furthermore, I also consider the impact of these non-cognitive traits on the gap in full-time employment in addition to providing evidence for hourly wages. Similar to the results by Mueller and Plug (2006) and to a lesser extent Fortin’s (2008) results, the evidence from decomposition techniques presented in this paper suggests that psychological traits play a significant and non-negligible role in explaining gender inequalities in employment and wages.

The economic consequences of psychological traits have been documented in a large number of studies. As the early literature is reviewed in Bowles, Gintis and Osborne (2001), the following short exposition focuses on recent evidence. Borghans, ter Wel and Weinberg (2008) present evidence from Britain, Germany and the US that suggests that individuals who were sociable persons in their youth choose different jobs than other people. They also suggest that recent changes in computerization and modern form of work organization like group and team work complement these social skills. Krueger and Schadke (2008) use time use data from the US and France and show that more gregarious workers prefer jobs that involve social interactions and are happier when their jobs involve these interactions. These

results are consistent with earlier evidence by Filer (1986) whose estimates for the US show that individuals' occupational choices are governed by psychological traits. Judge, Tippie and Bono (2001) conduct a meta analysis and show that psychological traits influence job performance and job satisfaction which is similar to the results by Krueger and Schadke (2008).

There is also a large literature on the direct wage effects of various psychological traits, mostly focusing on the US. Goldsmith, Veum and Darity (1997) use NLSY data and find that earnings are influenced by psychological traits. However, they do not look at gender differences. Kuhn and Weinberger (2005) use US data to investigate the effects of leadership skills. Their results indicate that these influence wages and the likelihood to hold a managerial position positively, even when controlling for cognitive skills. Osborne Groves (2005) presents evidence that psychological traits are significant predictors for the earnings of white women in the US. Waddel (2006) finds evidence for the US that poor attitude and low esteem during youth influence the individuals' educational attainment, later employment prospects and later wages negatively. Similar evidence for educational attainment is found by Coleman and DeLeire (2003) who present and estimate an economic model how locus of control influences human capital investment through (wage) return expectations. Heckman, Stixrud and Urzua (2006) present a large body of evidence that cognitive and non-cognitive abilities help to explain a large number of economic outcomes. Using the same dataset as my study, Heineck and Anger (2008) study the monetary returns of various cognitive and non-cognitive traits in Germany.

In addition to the evidence presented in the previously mentioned studies, some papers focus exclusively on gender differences in specific traits. Andreoni and Versterlund (2001) present experimental evidence that men and women differ in altruism with men being more

altruistic when it is cheap to do so and women being more altruistic when this behavior is costly. Barber and Odean (2001) explain gender differences in stock trading behavior by differences in overconfidence, while Gneezy, Niederle, Rustichini (2003) present experimental evidence that women perform differently than men in competitive environments even though performance is similar in non-competitive environments.

Finally, a strand of the literature aims at describing gender differences in the economic consequences of psychological traits. Mueller and Plug (2006) use US data to document gender differences in the returns to the “big five” psychological traits and present decomposition results that differences in traits may explain between 7.3% and 16.2% of the earnings gap (depending on the controls used) while IQ differences play no role for the explanation of the gender wage gap. Similarly, Chevalier (2007) shows that various job related expectations and valuations explain a large share of the wage gap among university graduates in the UK even when controlling for other factors. Fortin (2008) considers the impact of self-esteem, external locus of control and the subjective importance of money/work and family/people on the wages of two cohorts of US workers. Her results indicate a significant though modest contribution of these traits to the gender wage gap. Finally, Heineck (2007) focuses on differences in the wage returns to non-cognitive traits without attempting a formal decomposition analysis and documents gender differences in the magnitude of coefficients of personality traits in wage regressions for the UK.

On a theoretical level, Mueller and Plug (2006) mention differences in productivity and differences in preferences as possible channels through which personality or psychological traits might influence earnings. The first point emphasizes that psychological traits can be seen as skills that enhance or decrease an individual's performance in a job. One might, for instance, imagine that a very shy individual might be more productive as an accountant

than as a salesperson while the opposite might hold for a very communicative individual. Additionally, one could imagine channels that are not directly productivity related and through which traits might influence earnings if, for instance, the tendency to compromise affects the results of wage negotiations (Babcock and Laschever 2003).

Second, psychological traits may influence an individual's preference for certain jobs. For instance, one can imagine that the already mentioned highly communicative individual prefers being a salesperson over being an accountant, while his shy counterpart prefers the opposite. This idea is consistent with the findings by Krueger and Schadke (2008) who report occupational sorting of individuals with different levels of gregariousness into occupations which require different levels of social interactions.

This paper builds on the work by Mueller and Plug (2006) and Fortin (2008) and makes the following contributions: First, I consider a larger set of psychological traits than those used in previous decompositions, specifically the "big five", positive and negative reciprocity, locus of control and risk aversion. Second, this paper is the first to consider the contribution of differences in psychological traits for the gender gap in full-time employment using a decomposition technique developed by Fairlie (1999, 2004). Such a gap might arise, for instance, when there are no jobs available in which an individual with certain traits could work productively or when the available jobs do not fit the preferences of the respective individual. Finally, this paper is also the first to present decomposition results for psychological traits for a country other than the US.

The remainder of the paper is organized as follows: Section 2 describes the data and the estimation model used, while descriptive statistics are found in section 3. Results are found in section 4, section 5 concludes.

2 Data and Methods

The data used come primarily from the 2005 wave of the German Socio-Economic Panel (SOEP, see Wagner, Frick, Schupp 2007 for a general overview) while the measure of risk-aversion is taken from the 2004 wave. The analysis is based on the subsamples A to F. Sample A “Residents in the FRG”, surveyed since 1984, is drawn from the population of households whose head does not belong to one of the “guestworker” nationalities (Turkish, Greek, Yugoslavian, Spanish, and Italian). The latter were surveyed in sample B, labeled “Foreigners in the FRG”, which oversampled households with a household head with one of the aforementioned nationalities. Households from the (former) German Democratic Republic were included since July 1990 in Sample C “German Residents in the GDR”. In 1994/1995 households whose head migrated to Germany after 1984 were surveyed in sample D “Immigrants”. Samples E “Refreshment” and F “Innovation” beginning in 1998 and 2000 respectively were drawn from the population of the German households.¹ Further information on the sampling design as well as additional information on the overall structure of the SOEP can be found in Haisken-DeNew and Frick (2005).

I restrict the sample to individuals with a German nationality between 25 and 55 years of age. Note that this includes German individuals from samples B and D who live in a household with a foreign head. As interest lies in both employment and wages, I form two estimation samples. The “employment sample” is not restricted further and consists of 4,216 women and 3,849 men. For the “wage sample” I keep only full-time employed workers and drop individuals in the top and bottom 1% of the outcome distribution which leads to a sample of 1,353 women and 2,770 men. As the working hours of men and women differ

¹There is also a sample G “Oversampling of High Income”, surveyed since 2002, originally drawn from the population of households with a monthly income over 2,835 € (7,000 Deutsche Mark) that is not used in this analysis.

even among the full-time employed and in line with the work by Mueller and Plug (2006) and Fortin (2008) hourly wages are used in the analysis.²

The 2005 wave of the SOEP contains a variety of questions related to psychological traits (see table 1 for the exact wording of the questions). Note that the reliability ratios of the constructed traits (Cronbach's α , see Cronbach 1951), the square of the correlation between the constructed scale and the underlying factor, lie between 0.51 (agreeableness) and 0.83 (negative reciprocity) which is rather low but directly related to the relatively few questions for each trait (Mueller and Plug 2006, p. 8 and Heineck and Anger 2008, p. 14-15).

The first group of characteristics is based on the five factor taxonomy that goes back to Thurstone (1934). It distinguishes five basic personality traits, specifically openness (to experience), conscientiousness, extraversion, agreeableness and neuroticism. Openness to experience covers curiosity, creativity and appreciation for new or unconventional ideas, culture and art. Conscientiousness is related to self-discipline, a sense for duty, aim for achievement and a preference for planned instead of spontaneous behavior. Extraversion influences energetic and social behavior and engagement with the world. Agreeableness broadly reflects an individual's ability and tendency to get along well with other individuals. It also covers a tendency for cooperation and compromise instead of conflict. Finally, neuroticism can be thought of as emotional instability, e.g. the tendency to experience negative feelings, like anger, sorrow or anxiety, and to suffer from stress. Each of the traits is measured by the average of the responses on a seven point scale to three questions for each trait where higher values represent higher levels of the respective traits.

²Using the information on monthly labor income available in the SOEP, these have been calculated as follows: Monthly labor income * 12 months / 52 weeks / typical actual working hours per week.

(TABLE 1 ABOUT HERE.)

A second characteristic is external locus of control based on the work of Rotter (1966). Individuals with a high external locus of control believe that their lives are largely governed by fate, chance and other events outside their control. The trait is again measured as the average of the responses on a seven point scale to five questions. Another characteristic is reciprocity (see e.g. Fehr and Gächter 2000) that is an individual's willingness to return favorable (positive reciprocity) or hostile/negative acts of other individuals (negative reciprocity). Each of the traits is again measured by the average of the responses on a seven point scale to three questions for each trait.

Finally, a measure of the willingness to take risk is taken from the 2004 wave of the SOEP. Risk is measured on an eleven point scale where "0" corresponds to complete risk aversion and "10" to full preparedness to take risk. The question has been validated experimentally by a real-stake lottery conducted with a subset of the respondents and has been shown to be related to other activities involving risk (Dohmen et al. 2005).

Note at that point that, similar to Mueller and Plug (2006), personality traits and outcomes are measured at the same time which could lead to issues with reversed causality. Evidence from earlier studies, reviewed by Bouchard and Loehlin (2001) and usually based on comparisons between of monozygotic and dizygotic twins, between other members of the same family and combinations of these suggests that about 40% to 60% of the variation in personality is related to genetic factors and hence predetermined with respect to labor market outcomes. For the remaining part, some evidence suggests that large parts of personality are formed during childhood and adolescence (Caspi and Roberts 1999, Costa and McCrae 1994, 1997, Digman 1989) which also mitigates endogeneity concerns. Costa, Herbst,

McCrae and Siegler (2000) find only moderate changes in psychological traits caused by various events in life. However, they do find some evidence that changes in economic status might influence personality. There is also evidence that personality traits may change slightly in the process of aging (Allemand, Zimprich and Hertzog 2007). Taken together, this evidence is far from any proof for either the existence or absence of endogeneity problems. However, while some care should be taken with the econometric results, it seems safe to conclude that at least large parts of psychological traits are relatively fixed for adults.

In the first step of the econometric analysis, I run probit regressions for employment and OLS regressions for (log) wages. These regressions are estimated in three models separately for men and women. In model I, only the psychological traits are used as explanatory variables. This allows for the possibility of traits affecting educational and family decisions. In model II, I add information on parental background, specifically whether at least one parent completed higher secondary schooling (Abitur) and whether at least one parent graduated from university, the current family situation, that is dummies for being married and for cohabiting and the number of children under 16 years of age, years of completed schooling and a second order polynomial in age. In model III, additional controls for lifetime full-time work experience and lifetime unemployment experience are added as second order polynomials. Note that these variables can be seen as outcomes of personality in which case they can be expected to capture some of the possible returns to these traits.

For the wage decompositions, I 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. More formally, let \bar{y}^M and \bar{y}^F denote the average wage of men and women respectively. The decomposition

is then defined as

$$\bar{y}^M - \bar{y}^F = (\bar{X}^M - \bar{X}^F)' \beta^M + \bar{X}^{M'} (\beta^M - \beta^F), \quad (1)$$

where β^M and β^F are the coefficients from a regression on the male or female sample alone and \bar{X}^M and \bar{X}^F are the means of the respective independent variables. The first part of the right hand side of equation (1) is the part of the wage gap related to differences in average endowments, while the second part is related to differences in coefficients. Depending on the choice of the groups whose coefficients are used for weighting the differences, one either models a situation where women are paid like men or vice versa.

As usual, I 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. I also rely on the usual practice of using both the female and the male coefficients as weights for the decomposition. Standard errors for the decomposition are calculated by the method proposed in Jann (2008) which is similar to the well-known delta-method.

Note that there are no categorical variables in the analysis which are problematic in decompositions as the explained part of the differential is sensitive to the choice of the excluded base alternative (Oaxaca and Ransom 1999, Gardeazabal and Ugidos 2004).

In the case of the employment regressions, I rely on the decomposition technique developed by Fairlie (1999, 2004) who shows that for binary choice models the raw difference

in the outcome can be decomposed as

$$\bar{Y}^M - \bar{Y}^F = \left[\sum_{i=1}^{N^M} \frac{F(X_i^M \hat{\beta}^M)}{N^M} - \sum_{i=1}^{N^F} \frac{F(X_i^F \hat{\beta}^M)}{N^F} \right] - \left[\sum_{i=1}^{N^M} \frac{F(X_i^F \hat{\beta}^M)}{N^F} - \sum_{i=1}^{N^F} \frac{F(X_i^F \hat{\beta}^F)}{N^F} \right], \quad (2)$$

where the first term in brackets is the part of the outcome differential that is due to differences in endowments and the second term represents the term attributable to differences in coefficients. Standard errors for that decomposition are computed using 100 bootstrap replications.³

3 Descriptives

Consider the descriptive evidence displayed in table 2. Note first that there are considerable gender differences in the outcome measures: Women are much less likely than men to be full-time employed and also earn about 1,200 Euro per month and about 3 Euro per hour less than men.

(TABLE 2 ABOUT HERE.)

For the control variables, the descriptive results show similar values for the socio-economic background variables and average years of schooling. As one might expect, there are large differences in full-time work experience in favor of men.

(FIGURE 1 ABOUT HERE.)

Focus now on differences in the psychological traits. To facilitate size comparisons, figure 1 display the percentage deviations of women's mean traits from the corresponding

³The decomposition uses the ado-File *fairlie* by Ben Jann (Jann 2006).

value for men. As results are similar for the employment and wage samples, only the former are displayed. Men and women do not differ in positive reciprocity, that is their willingness to return favorable acts, and in external locus of control, that is their belief on their ability to influence the world through their actions. Only small, albeit significant differences are found for openness to experience, extraversion and conscientiousness. Larger differences are found for the remaining traits: In both samples, women have higher levels of agreeableness and higher levels of neuroticism, that is a lower emotional stability. Men are more revengeful as shown by their higher levels of negative reciprocity and more willing to bear risks.

4 Results

4.1 Employment

Consider the results for the probit estimation displayed in table 3. As there is no direct structural model underlying these estimates, coefficients should be seen as suggestive, rather than causal evidence. Focusing on similarities and differences between men and women, we see a relatively pattern of results for most of the psychological traits when it comes to signs and significance: For both men and women, higher levels of conscientiousness (discipline) and positive reciprocity are associated with a higher likelihood to be full-time employed, while high levels of agreeableness, neuroticism and an external locus of control have the opposite effect. Note that some of these effects are correlated with past labor market experiences as their influence diminishes when we control for past experiences.

(TABLE 3 ABOUT HERE.)

Gender differences are noted for openness for experience that shows a negative association with employment prospects for men while no such effect exists for women and willingness to take risks which has a positive effect for women and none for men. Focusing on the marginal effects at the lower panel of table 3, we see that all significant coefficients also lead to relatively large changes in the probability of full-time employment. Women profit more from higher levels of conscientiousness than men. However, they are also to a greater deal harmed by higher levels of agreeableness. Neuroticism and positive reciprocity have a relatively similar effect on men and women, while the negative effects of an external locus of control are much larger for men.

Now turn to the decomposition results in table 4. Consider first the results using only the psychological traits in model I. Here, between 1.7 and 3.5 percentage points or between 3.6% and 7.4% of the gap in full-time employment can be explained by differences in psychological traits. Of these, the “big five” and in particular conscientiousness, agreeableness and neuroticism are dominant factors. Openness matters only when using the male coefficients for weighting, but explains only a relatively minor share of the gap. Differences in extraversion do not account for the gap.

(TABLE 4 ABOUT HERE.)

Looking at the remaining characteristics, we find that both differences in reciprocity and in external locus of control account at best for relatively tiny shares of the gap. Willingness to take risks explains a rather large share in model I when using the female coefficients as weights but matters comparatively less when using the male coefficients.

Adding further background variables in models II and III has the effect of raising the overall explained share to up to 51% of the observed gap, mostly due to the inclusion of

variables related to past labor market experience. The effect of the psychological traits diminishes with the inclusion of additional variables in these models. However, the overall pattern of results remains relative similar over models.

4.2 Wages

Turn now to the results for the wage regressions found in table 5. Higher levels of openness to experience are only associated with higher wages for men in models I and III. Extraversion, e.g. on outgoing personality, does not influence wages for either men or women. Conscientiousness (self-discipline) and agreeableness (the ability to get along well with other individuals) are generally related to negative wage effects. Here, the results show that the negative effects of conscientiousness are typically stronger for men, while the opposite holds for agreeableness. The latter result might be explained by the higher tendency to compromise and shy away from conflicts by individuals with a high levels of agreeableness. Neuroticism (emotional instability) matters negatively for women in all models with some weakly statistically significant negative effect for men in model III. These results are broadly consistent with the results by Heineck (2007) for the UK and the findings by Mueller and Plug (2006) for the US.

(TABLE 5 ABOUT HERE.)

Positive reciprocity does not matter for wages, while negative reciprocity hurts the wages of both men and women in model I. Finally, risk aversion does not seem to play a large role with only some small negative effects being found for men, while a high external locus of control leads to large wage penalties for both men and women.

As the psychological traits are measured on a dimensionless scale, the size and economic significance of the results are hard to judge at a first glance. To facilitate interpretation, the lower panel in table 5 displays simulated wage increases for a one standard deviation increase in the respective trait. Standard deviations are taken from the male and female sample respectively. The main result here is that all significant coefficients also lead to associated (log) wage changes in the magnitude of 0.01 to 0.07 which is non-negligible from an economic point of view.

Consider now the decomposition results in table 6. Note first that the results differ considerably between the estimates using the male coefficients as weights and those using the female coefficients. Using the male coefficients, the “big five” personality traits explain between 13.6% and 17.7% of the observed wage gap. In the estimates using the female coefficients, the explained share of the wage gap that can be attributed to these personality differences drops to between 4.9% and 5.8%. While this strong dependence on the weights is unusual, the results can be seen as the range of plausible estimates. Additionally, the qualitative results for the detailed decompositions are also relatively unaffected by the choice of the weights. In all models the major determinants of earnings inequality are the women’s higher average levels of agreeableness and neuroticism. Additionally, the rather small differences in conscientiousness play a surprisingly large role for the determination of the gender wage gap. Looking at the remaining traits, we observe that only (negative) reciprocity plays any role for the explanation of the gender wage gap while positive reciprocity, external locus of control and willingness to take risks typically either small or insignificant or both.

(TABLE 6 ABOUT HERE.)

If we compare these results with the results for full-time employment in the preceding section, we observe both similarities and differences. For the “big five”, we observe relatively similar disadvantages for women in both wages and employment due to their higher levels of agreeableness and the relative minor differences in conscientiousness. The results for neuroticism vary with the coefficients used as weights, but we can note that differences in this trait work mostly in favor of men. Differences in extraversion do not seem to matter for either wages or employment, while differences in openness to experience have no clear effect for the explanation of gender inequalities. Differences in external locus of control which was the biggest single factor for the explanation of the employment gap do not matter at all when considering wage differences. For negative reciprocity that matters only in the models without further control variables, gender differences widen the employment gap but work in favor of women when it comes to wages. Differences in positive reciprocity and willingness to take risks play only relatively minor roles for the gender gap in either employment or wages.

To sum up, the results presented here are relatively similar to earlier results for wage inequality by Mueller and Plug (2006) and to a lesser extent by Fortin (2008) who did not consider differences in the “big five”. These differences, especially in agreeableness, neuroticism and to a lesser extent conscientiousness, explain between 5% and 18% of the gender wage gap which is similar to the results by Mueller and Plug (2006) for the US. Regarding the gap in full-time employment, the results show that differences in external locus of control contribute significantly to the observed gap, while differences in agreeableness, neuroticism and conscientiousness also play a role. Additionally, the results suggest that gender differences in psychological traits play a bigger role for explaining gender differences in wages than in employment.

5 Conclusion

This paper considered the importance of gender differences in various psychological traits, specifically the “big five”, positive and negative reciprocity, locus of control and risk aversion for gender inequalities in wages and employment. Building on earlier research by Mueller and Plug (2006) and Fortin (2008), I show that differences in these traits contribute to the observed wage and employment differences. Differences in psychological traits are more important for inequalities in wages than in employment as they explain up to 18% of the observed wage differences and only up to 7% of the observed differences in full-time employment. However, differences in the “big five”, in particular in agreeableness, conscientiousness and neuroticism matter for both wages and employment. In the latter, the results also show a large effect for differences in external locus of control.

These results, that are similar to the findings by Mueller and Plug (2006) and to a lesser extent by Fortin (2008), provide first evidence that personality differences matter for gender wage inequality for a country outside the US. Additionally, the results presented in this paper show that psychological traits have different effects for wages and employment and also contribute differently to gender differences in these variables.

6 References

1. Allemand, Mathias, Daniel Zimprich and Christopher Hertzog, **2007**: “Cross-sectional age differences and longitudinal age changes of personality in middle adulthood and old age”, *Journal of Personality* 75(2), pp. 323-358.
2. Andreoni, James and Lisa Versterlund, **2001**: “Which is the fair sex? Gender differences in altruism”, *Quarterly Journal of Economics* 116(1), pp. 293-312.
3. Babcock, Linda, and Sara Laschever, **2003**: “*Women don’t ask: Negotiation and the gender divide*”, Princeton: Princeton University Press.

4. Barber, Brad M. and Terrance Odean, **2001**: “Boys will be boys: Gender, overconfidence, and common stock investment”, *Quarterly Journal of Economics* 116(1), pp. 261-292.
5. Borghans, Lex, Angela Lee Duckworth, James J. Heckman and Bas ter Wel, **2008**: “The economics and psychology of personality traits”, *The Journal of Human Resources* 43(4), pp. 972-1059.
6. Borghans, Lex, Bas ter Wel and Bruce A. Weinberg, **2008**: “Interpersonal styles and labor market outcomes”, *The Journal of Human Resources* 43(4), pp. 815-858.
7. Bouchard, Thomas J., Jr. and John C. Loehlin, **2001**: “Genes, evolution, and personality”, *Behavioral Genetics* 31(3), pp. 243-273.
8. Bowles, Samuel, Herb Gintis and Melissa Osborne, **2001**: “The determinants of earnings: A behavioral approach”, *Journal of Economics Literature* 39(4), pp. 1137-1176.
9. Caspi, Avshalom and Brent W. Roberts, **1999**: “Personality Continuity and Change across the Life Course”, in Lawrence A. Pervin and Oliver P. John (eds.): *Handbook of Personality: Theory and Research*, New York: Guilford.
10. Chevalier, Arnaud, **2007**: “Motivation, expectations and the gender pay gap among UK graduates”, *Oxford Bulletin of Economics and Statistics* 69(6), pp. 819-842.
11. Coleman, Margo and Thomas DeLeire, **2003**: “An economics model of locus of control and the human capital investment decision”, *Journal of Human Resources* 38(3), pp. 701-721.
12. Costa, Paul Z., Jeffrey H. Herbst, Robert R. McCrae and Ilene C. Siegler, **2000**: “Personality at midlife: Stability, intrinsic maturation, and response to life events”, *Assessment* 7(4), pp. 365-378.
13. Costa, Paul T., and Robert R. McCrae, **1994**: “Set Like Plaster? Evidence for the Stability of Adult Personality”, in Todd F. Heatherton and Joel L. Weinberger (eds.): *Can Personality Change?*, Washington, D.C.: American Psychological Association.
14. Costa, Paul T., and Robert R. McCrae, **1997**: “Longitudinal Stability of Adult Personality.”, in Robert Hogan, John Johnson, and Stephen Briggs (eds.): *Handbook of Personality Psychology*, San Diego, Calif.: Academic.
15. Cronbach, Lee J., **1951**: “Coefficient alpha and the internal structure of tests”, *Psychometrika* 16, pp. 297-334.
16. Digman, John M., **1989**: “Five Robust Trait Dimensions: Development, Stability, and Utility”, *Journal of Personality* 57(2), pp. 195-214.
17. Dohmen, Thomas, Armin Falk, David Huffman, Uwe Sunde, Jürgen Schupp, and Gert G. Wagner, **2005**: “Individual Risk Attitudes: New Evidence from a Large, Representative, Experimentally-Validated Survey”, *IZA Discussion Paper* 1730.
18. Fairlie, Robert W., **1999**: “The absence of the African-American owned business: An analysis of the dynamics of self-employment”, *Journal of Labor Economics* 17(1), pp. 80-108.

19. Fairlie, Robert W., **2004**: “An extension of the Blinder-Oaxaca decomposition technique to Logit and Probit models”, *Journal of Economic and Social Measurement* 30(4), pp. 305-316.
20. Fehr, Ernst and Simon Gächter, **2000**: “Fairness and Retaliation: The Economics of Reciprocity”, *Journal of Economic Perspectives* 14(3), pp. 159-181.
21. Filer, Randall K., **1986**: “The role of personality and tastes in determining occupational structure”, *Industrial and Labor Relations Review* 39(3), pp. 412-424.
22. Fortin, Nicole M., **2008**: “The gender wage gap among young adults in the United States – The importance of money versus people”, *The Journal of Human Resources* 43(4), pp. 884-918.
23. Gardeazabal, Javier and Arantza Ugidos, **2004**: “More on the identification in detailed wage decompositions”, *Review of Economics and Statistics* 86(4), pp. 1035-1057.
24. Gneezy, Uri, Muriel Niederle and Also Rustichini, **2003**: “Performance in competitive environments: Gender differences”, *Quarterly Journal of Economics* 118(3), pp. 815-829.
25. Goldsmith, Arthur H., Jonathan R. Veum and William Darity, **1997**: “The impact of psychological and human capital on wages”, *Economic Inquiry* 35(4), pp. 815-829.
26. Heckman, James J., Jora Stixrud and Sergio Urzua, **2006**: “The effects of cognitive and noncognitive abilities on labor market outcomes and social behavior”, *Journal of Labor Economics* 24(3), pp. 411-482.
27. Heineck, Guido, **2007**: “Does it pay to be nice? Personality and earnings in the UK”, *LASER Discussion Paper No. 3*, Nuremberg.
28. Heineck, Guido and Silke Anger, **2008**: “The returns to cognitive ability and personality traits in Germany”, *SOEPpapers on Multidisciplinary Panel Data Research No. 124*, Berlin.
29. Jann, Ben, **2006**: “Fairlie: Stata module to generate nonlinear decomposition of binary outcome differentials”, available from <http://ideas.repec.org/c/boc/bocode/s456727.html>.
30. Jann, Ben, **2008**: “The Blinder-Oaxaca decomposition for linear regression models”, *The Stata Journal* 8(4), pp. 453-479.
31. Judge, Timothy A. and Joyce E. Bono, **2001**: “Relationship of core self evaluation traits – self-esteem, generalized self-efficacy, locus of control and emotional stability – with job satisfaction and job performance: A meta-analysis”, *Journal of Applied Psychology* 86(1), pp. 80-92.
32. Krueger, Alan B. and David Schkade, **2008**: “Sorting in the labor market – Do gregarious workers flock to interactive jobs?”, *The Journal of Human Resources* 43(4), pp. 859-883.
33. Kuhn, Peter and Catherine Weinberger, **2005**: “Leadership skills and wages”, *Journal of Labor Economics* 23(3), pp. 395-436.

34. Mueller, Gerrit and Erik S. Plug, **2006**: “Estimating the effect of personality on male-female earnings”, *Industrial and Labor Relations Review* 60(1), pp. 3-22.
35. Oaxaca, Ronald L. and Michael R. Ransom, **1994**: “On discrimination and decomposition of wage differentials”, *Journal of Econometrics* 61(1), pp. 5-21.
36. Oaxaca, Ronald L. and Michael R. Ransom, **1999**: “Identification in detailed wage decompositions”, *Review of Economics and Statistics* 81(1), pp. 154-157.
37. Osborne Groves, Melissa, **2005**: “How important is your personality? Labor market returns to personality for women in the US and UK”, *Journal of Economic Psychology* 26(6), pp. 827-841.
38. Rotter, Julian B., **1966**: “Generalized expectancies for internal versus external control of reinforcement”. *Psychological Monographs* 80(1), American Psychological Association.
39. Thurstone, Louis L., **1934**: “The vectors of the mind”, *Psychological Review* 41, pp. 1-32.
40. Waddel, Glenn R., **2006**: “Labor market consequences of poor attitude and low self-esteem in youth”, *Economic Inquiry* 44(1), pp. 69-97.
41. Wagner, Gerd G., Joachim R. Frick and Jürgen Schupp, **2007**: “The German Socio-Economic Panel Study (SOEP) – Scope, Evolution and Enhancements”, *Schmollers Jahrbuch / Journal of Applied Social Science Studies* 127(1), pp. 139-169.

7 Tables

TABLE 1: QUESTIONS RELATED TO PERSONALITY TRAITS

Question	Trait
Risk aversion: Are you generally a person who is fully prepared to take risks or do you try to avoid taking risks? 0 (risk averse) - 10 (fully prepared to take risks)	Willingness to take risks
Big five: I see myself as someone who... ... is original, comes up with new ideas. ... values artistic experiences. ... has an active imagination.	Openess to experience
... does a thorough job. ... tends to be lazy (reversed coding). ... does things effectively and efficiently.	Conscientiousness
... is communicative, talkative. ... is outgoing, sociable. ... is reserved (reversed coding).	Extraversion
... is sometimes somewhat rude to others (reversed) ... has a forgiving nature ... is considerate and kind to others	Agreeableness
... worries a lot ... gets nervous easily ... is relaxed, handles stress well (reversed)	Neuroticism
Locus of control: Compared to other people, I have not achieved what I deserve. What a person achieves in life is above all a question of fate or luck. I frequently have the experience that other people have a controlling influence over my life. The opportunities that I have in life are determined by the social conditions. Inborn abilities are more important than any efforts one can make.	External locus of control
Reciprocity: If someone does me a favor, I am prepared to return it. I go out of my way to help somebody who has been kind to me before. I am ready to undergo personal costs to help somebody who helped me before.	Positive Reciprocity
If I suffer a serious wrong, I will take revenge as soon as possible, no matter what the cost. If somebody puts me in a difficult position, I will do the same to him/her. If somebody offends me, I will offend him/her back.	Negative Reciprocity

Questions taken from the SOEP questionnaires using SOEPinfo (<http://panel.gsoep.de/soepinfo2007/>).

TABLE 2: DESCRIPTIVE STATISTICS

Variable	Women		Men		P-Value
	Mean	Std.dev.	Mean	Std.dev.	
EMPLOYMENT SAMPLE					
Individual is full-time employed (1 = yes)	0.3615	0.4805	0.8342	0.3719	0.0000
Openess to experiece	4.6212	1.1736	4.4411	1.1162	0.0000
Extraversion	4.9870	1.1252	4.7440	1.1010	0.0000
Conscientiousness	6.0342	0.8433	5.9402	0.8815	0.0000
Agreeableness	5.5815	0.9125	5.2645	0.9793	0.0000
Neuroticism	4.1580	1.1942	3.6840	1.1615	0.0000
Positive reciprocity	5.8594	0.8950	5.8746	0.8756	0.4405
Negative reciprocity	2.9621	1.3896	3.3553	1.4595	0.0000
External locus of control	3.6432	0.9179	3.6374	0.9326	0.7789
Willingness to take risks	4.2540	2.1527	5.1878	2.1113	0.0000
At least one parent has higher secondary schooling (1 = yes)	0.1229	0.3283	0.1268	0.3328	0.5948
At least one parent has academic training (1 = yes)	0.1492	0.3563	0.1650	0.3712	0.0519
Children under 16 years of age in HH (1 = yes)	1.5320	0.4990	1.5747	0.4945	0.0001
Individual is married (1 = yes)	0.6525	0.4762	0.6191	0.4857	0.0019
Individual has partner (1 = yes)	0.1366	0.3435	0.1338	0.3405	0.7113
Age (years)	40.5688	8.4167	40.8241	8.2430	0.1690
Years of schooling	12.5042	2.4718	12.6143	2.6369	0.0536
Full-time work experience (years)	10.4861	8.4019	17.1414	9.2920	0.0000
Unemployment experiece (years)	0.8931	1.9232	0.7223	1.7051	0.0000
No. of Obs.	4,216		3,849		
WAGE SAMPLE					
Monthly labor income	1707.5188	998.6657	2938.7668	1288.8521	0.0000
Hourly labor income (€)	12.5129	6.1064	15.7691	6.9377	0.0000
Openess to experiece	4.6020	1.1738	4.3909	1.1033	0.0000
Extraversion	5.0211	1.1100	4.7313	1.0990	0.0000
Conscientiousness	6.0882	0.8078	5.9697	0.8457	0.0000
Agreeableness	5.5815	0.9052	5.2569	0.9781	0.0000
Neuroticism	4.1202	1.1827	3.6566	1.1455	0.0000
Positive reciprocity	5.8982	0.8790	5.8834	0.8653	0.5065
Negative reciprocity	2.9658	1.3946	3.3367	1.4449	0.0000
External locus of control	3.6220	0.8988	3.6194	0.8944	0.9071
Willingness to take risks	4.2316	2.1602	5.1076	2.1089	0.0000
At least one parent has higher secondary schooling (1 = yes)	0.1061	0.3080	0.1117	0.3150	0.4813
At least one parent has academic training (1 = yes)	0.1360	0.3428	0.1445	0.3516	0.3357
Children under 16 years of age in HH (1 = yes)	1.5885	0.4922	1.5379	0.4986	0.0001
Individual is married (1 = yes)	0.6381	0.4806	0.6644	0.4723	0.0311
Individual has partner (1 = yes)	0.1454	0.3525	0.1227	0.3282	0.0093
Age (years)	39.6644	8.7402	40.9206	7.9015	0.0000
Years of schooling	12.4574	2.5025	12.4909	2.6364	0.6094
Full-time work experience (years)	11.2948	8.6876	17.5328	9.0736	0.0000
Unemployment experiece (years)	0.6067	1.3655	0.4447	1.0796	0.0000
No. of Obs.	1,353		2,770		

All values taken from the 2005 wave of the SOEP except “willingness to take risks” which is taken from the 2004 wave.

TABLE 3: EMPLOYMENT REGRESSION RESULTS, PROBIT ESTIMATES

Variable	Model I		Model II		Model III	
	Male results	Female results	Male results	Female results	Male results	Female results
	FULL TIME EMPLOYMENT, PROBIT ESTIMATES					
Openess to experience	-0.0622* (0.0253)	0.0285 (0.0189)	-0.0594* (0.0262)	-0.0062 (0.0204)	-0.0304 (0.0294)	0.0212 (0.0228)
Extraversion	-0.0208 (0.0252)	-0.0168 (0.0200)	-0.0100 (0.0260)	0.0048 (0.0212)	-0.0020 (0.0281)	-0.0127 (0.0243)
Conscientiousness	0.2115*** (0.0295)	0.1502*** (0.0265)	0.1892*** (0.0305)	0.2061*** (0.0304)	0.1105** (0.0343)	0.1380*** (0.0351)
Agreeableness	-0.1037*** (0.0290)	-0.1374*** (0.0248)	-0.0913** (0.0297)	-0.1146*** (0.0266)	-0.0712* (0.0334)	-0.0639* (0.0301)
Neuroticism	-0.0625** (0.0234)	-0.0525** (0.0177)	-0.0652** (0.0241)	-0.0482* (0.0187)	-0.0329 (0.0273)	-0.0319 (0.0213)
Positive reciprocity	0.0620* (0.0307)	0.0619** (0.0238)	0.0660* (0.0317)	0.0525* (0.0257)	0.0388 (0.0355)	0.0500+ (0.0286)
Negative reciprocity	-0.0062 (0.0195)	0.0053 (0.0158)	0.0183 (0.0200)	0.0279 (0.0172)	0.0191 (0.0230)	0.0082 (0.0195)
External locus of control	-0.2557*** (0.0293)	-0.1128*** (0.0231)	-0.2422*** (0.0302)	-0.0810** (0.0253)	-0.1727*** (0.0341)	-0.0627* (0.0286)
Willingness to take risks	0.0135 (0.0124)	0.0380*** (0.0096)	0.0207 (0.0130)	0.0167 (0.0104)	0.0138 (0.0144)	0.0214+ (0.0119)
	MARGINAL EFFECTS AT MEANS					
Openess to experience	-.0147*	.0106	-.0130*	-.0023	-.0055	.0072
Extraversion	-.0049	-.0063	-.0022	.0018	-.0004	-.0043
Conscientiousness	.0499***	.0561***	.0414***	.0753***	.0198**	.0466***
Agreeableness	-.0245***	-.0513***	-.0120**	-.0419***	-.0128*	-.0216*
Neuroticism	-.0147**	-.0196**	-.0142**	-.0176*	-.0059	-.0108
Positive reciprocity	.0146*	.0231**	.0144*	.0192*	.0070	.0169+
Negative reciprocity	-.0015	.0020	.0040	.0102	.0034	.0028
External locus of control	-.0603***	-.0421***	-.0530***	-.0296***	-.0310***	-.0212*
Willingness to take risks	.0032	.0142***	.0045	.0061	.0025	.0072+
No. of Obs.	3,849	4,216	3,849	4,216	3,849	4,216
Additional controls						
Parental background	(no)	(no)	(yes)	(yes)	(yes)	(yes)
Current family situation	(no)	(no)	(yes)	(yes)	(yes)	(yes)
Age	(no)	(no)	(yes)	(yes)	(yes)	(yes)
Education	(no)	(no)	(yes)	(yes)	(yes)	(yes)
Employment experience	(no)	(no)	(no)	(no)	(yes)	(yes)
Unemployment experience	(no)	(no)	(no)	(no)	(yes)	(yes)

Coefficients, robust standard errors in parentheses. ***/**/*/+ denote significance on the 0.1%, 1%, 5% and 10% level respectively. Full estimation results are available from the author on request.

TABLE 4: DECOMPOSITION RESULTS: SHARE OF FULL-TIME EMPLOYED, FAIRLIE DECOMPOSITION

Variable	Model I		Model II		Model III	
	Male coeffs.	Female coeffs.	Male coeffs.	Female coeffs.	Male coeffs.	Female coeffs.
Share women	0.3615	0.3615	0.3615	0.3615	0.3615	0.3615
Share men	0.8342	0.8342	0.8342	0.8342	0.8342	0.8342
Difference	-0.4728	-0.4728	-0.4728	-0.4728	-0.4728	-0.4728
Total explained	-0.0166	-0.0348	-0.0165	-0.0464	-0.2397	-0.2410
Big Five:	-0.0084*	-0.0214***	-0.0068+	-0.0138**	-0.0085+	-0.0058
	(0.0040)	(0.0049)	(0.0037)	(0.0043)	(0.0046)	(0.0038)
Openess to experience	-0.0015**	0.0017	-0.0014*	-0.0005	-0.0014	0.0011
	(0.0006)	(0.0012)	(0.0005)	(0.0011)	(0.0012)	(0.0010)
Extraversion	-0.0007	-0.0014	-0.0003	0.0003	-0.0001	-0.0007
	(0.0009)	(0.0018)	(0.0009)	(0.0016)	(0.0019)	(0.0013)
Conscientiousness	0.0098***	0.0027***	0.0083***	0.0042***	0.0026**	0.0006***
	(0.0015)	(0.0005)	(0.0015)	(0.0005)	(0.0009)	(0.0002)
Agreeableness	-0.0080***	-0.0156***	-0.0066**	-0.0106***	-0.0052*	-0.0041*
	(0.0022)	(0.0028)	(0.0022)	(0.0024)	(0.0026)	(0.0020)
Neuroticism	-0.0080**	-0.0088**	-0.0068**	-0.0073**	-0.0043	-0.0027
	(0.0029)	(0.0029)	(0.0024)	(0.0028)	(0.0029)	(0.0026)
Reciprocity:	0.0005	-0.0012	-0.0009	-0.0041+	-0.0020	-0.0013
	(0.0015)	(0.0024)	(0.0016)	(0.0021)	(0.0020)	(0.0016)
Positive reciprocity	0.0001	-0.0004*	0.0004*	-0.0006*	-0.0002	-0.0007+
	(0.0001)	(0.0001)	(0.0002)	(0.0003)	(0.0001)	(0.0004)
Negative reciprocity	0.0004	-0.0008	-0.0013	-0.0035	-0.0018	-0.0006
	(0.0014)	(0.0024)	(0.0015)	(0.0021)	(0.0020)	(0.0016)
External locus of control	-0.0055***	0.0004*	0.0042***	-0.0005**	0.0019***	-0.0004*
	(0.0008)	(0.0002)	(0.0007)	(0.0002)	(0.0004)	(0.0002)
Willingness to take risks	-0.0031	-0.0127***	-0.0041+	-0.0046	-0.0037	-0.0040+
	(0.0029)	(0.0032)	(0.0024)	(0.0030)	(0.0031)	(0.0024)
Age			-0.0038***	-0.0066***	0.0265***	0.0092***
			(0.0011)	(0.0012)	(0.0014)	(0.0017)
Parental background			0.0004	0.0003	0.0002	0.0001
			(0.0003)	(0.0004)	(0.0004)	(0.0003)
Current family situation			-0.0018	-0.0167***	0.0022	-0.0145***
			(0.0019)	(0.0012)	(0.0017)	(0.0011)
Education			-0.0037***	-0.0003	-0.0011**	-0.0034***
			(0.0010)	(0.0004)	(0.0004)	(0.0004)
Labor market career					-0.2552***	-0.2208***
					(0.0129)	(0.0088)

Standard errors based on 100 bootstrap replications in parentheses. ***/**/*/+ denote significance on the 0.1%, 1%, 5% and 10% level respectively. Full estimation results are available from the author on request.

TABLE 5: WAGE REGRESSION RESULTS: LOG HOURLY WAGES, OLS ESTIMATES

Variable	Model I		Model II		Model III	
	Male results	Female results	Male results	Female results	Male results	Female results
	COEFFICIENTS					
Openness to experience	0.0298** (0.0074)	0.0167 (0.0103)	0.0110 (0.0069)	0.0047 (0.0095)	0.0112+ (0.0066)	0.0056 (0.0092)
Extraversion	-0.0119 (0.0075)	-0.0172 (0.0104)	-0.0010 (0.0068)	-0.0067 (0.0097)	-0.0001 (0.0065)	-0.0106 (0.0094)
Conscientiousness	-0.0446*** (0.0099)	-0.0433** (0.0147)	-0.0313*** (0.0093)	-0.0424** (0.0137)	-0.0347*** (0.0089)	-0.0416** (0.0133)
Agreeableness	-0.0201* (0.0088)	-0.0471*** (0.0124)	-0.0136+ (0.0081)	-0.0361** (0.0116)	-0.0076 (0.0077)	-0.0314** (0.0112)
Neuroticism	-0.0065 (0.0071)	-0.0310** (0.0095)	-0.0097 (0.0065)	-0.0272** (0.0089)	-0.0114+ (0.0063)	-0.0212* (0.0085)
Positive reciprocity	0.0060 (0.0099)	0.0093 (0.0120)	0.0033 (0.0090)	-0.0018 (0.0114)	0.0019 (0.0087)	0.0010 (0.0108)
Negative reciprocity	-0.0218*** (0.0060)	-0.0235** (0.0086)	-0.0033 (0.0055)	-0.0070 (0.0085)	-0.0007 (0.0054)	-0.0080 (0.0082)
External locus of control	-0.0836*** (0.0092)	-0.0720*** (0.0130)	-0.0585*** (0.0086)	-0.0651*** (0.0126)	-0.0506*** (0.0083)	-0.0571*** (0.0123)
Willingness to take risks	-0.0089* (0.0040)	-0.0027 (0.0053)	-0.0051 (0.0036)	-0.0038 (0.0051)	-0.0058+ (0.0035)	0.0014 (0.0049)
	SIMULATED WAGE INCREASES BY 1 STD.DEV. INCREASE IN TRAITS					
Openness to experience	0.0329*** (0.0184)	0.0184 (0.0121)	0.0121 (0.0086)	0.0052 (0.0074)	0.0124+ (0.0081)	0.0062 (0.0116)
Extraversion	-0.0377*** (0.0197*)	-0.0366** (0.0461***)	-0.0265*** (0.0133+)	-0.0359** (0.0353**)	-0.0293*** (0.0074)	-0.0352*** (0.0307***)
Conscientiousness	-0.0197* (0.0074)	-0.0355** (0.0080)	-0.0111 (0.0029)	-0.0312** (0.0016)	-0.0131+ (0.0016)	-0.0243* (0.0009)
Agreeableness	0.0052 (0.0315***)	-0.0340** (0.0644***)	0.0048 (0.0523***)	-0.0101 (0.0582***)	-0.0010 (0.0453***)	-0.0116 (0.0511***)
Neuroticism	-0.0748*** (0.0188*)	-0.0644*** (0.0057)	-0.0523*** (0.0108)	-0.0582*** (0.0080)	-0.0453*** (0.0122+)	-0.0511*** (0.0030)
External locus of control	2,730 (0.0514)	1,343 (0.0634)	2,730 (0.2301)	1,343 (0.1811)	2,730 (0.2837)	1,343 (0.2556)
Willingness to take risks	(no)	(no)	(yes)	(yes)	(yes)	(yes)
Parental background	(no)	(no)	(yes)	(yes)	(yes)	(yes)
Current family situation	(no)	(no)	(yes)	(yes)	(yes)	(yes)
Age	(no)	(no)	(yes)	(yes)	(yes)	(yes)
Education	(no)	(no)	(yes)	(yes)	(yes)	(yes)
Employment experience	(no)	(no)	(no)	(no)	(no)	(no)
Unemployment experience	(no)	(no)	(no)	(no)	(no)	(no)

Coefficients, robust standard errors in parentheses. ***/**/*/+ denote significance on the 0.1%, 1%, 5% and 10% level respectively. Full estimation results are available from the author on request.

TABLE 6: DECOMPOSITION RESULTS: LOG HOURLY WAGES, OAXACA-BLINDER-DECOMPOSITION

Variable	Model I		Model II		Model III	
	Male coeffs.	Female coeffs.	Male coeffs.	Female coeffs.	Male coeffs.	Female coeffs.
weighted by:						
Avg. log wage women	2.5156*** (0.0110)	2.5156*** (0.0110)	2.5156*** (0.0110)	2.5156*** (0.0110)	2.5156*** (0.0110)	2.5156*** (0.0110)
Avg. log wage men	2.6977*** (0.0078)	2.6977*** (0.0078)	2.6977*** (0.0078)	2.6977*** (0.0078)	2.6977*** (0.0078)	2.6977*** (0.0078)
Difference	-0.1821*** (0.0135)	-0.1821*** (0.0135)	-0.1821*** (0.0135)	-0.1821*** (0.0135)	-0.1821*** (0.0135)	-0.1821*** (0.0135)
Total explained	-0.0184* (0.0083)	0.0073 (0.0063)	-0.0036 (0.0115)	-0.0317*** (0.0091)	-0.0337** (0.0124)	-0.0397*** (0.0101)
Big five:	-0.0324*** (0.0069)	-0.0105* (0.0050)	-0.0277*** (0.0065)	-0.0096* (0.0044)	-0.0248*** (0.0061)	-0.0089* (0.0042)
Openess to experience	0.0042 (0.0026)	0.0074*** (0.0022)	0.0012 (0.0024)	0.0028 (0.0018)	0.0014 (0.0023)	0.0028 (0.0017)
Extraversion	-0.0050 (0.0032)	-0.0035 (0.0023)	-0.0020 (0.0029)	-0.0003 (0.0020)	-0.0031 (0.0028)	-0.0000 (0.0020)
Conscientiousness	-0.0062* (0.0024)	-0.0064*** (0.0018)	-0.0061** (0.0023)	-0.0045** (0.0015)	-0.0059** (0.0022)	-0.0050** (0.0016)
Agreeableness	-0.0126*** (0.0038)	-0.0054* (0.0025)	-0.0097** (0.0035)	-0.0036+ (0.0022)	-0.0084* (0.0033)	-0.0020 (0.0021)
Neuroticism	-0.0128** (0.0041)	-0.0027 (0.0029)	-0.0112** (0.0038)	-0.0040 (0.0027)	-0.0087* (0.0036)	-0.0047+ (0.0026)
Reciprocity:	0.0094** (0.0035)	0.0086*** (0.0026)	0.0026 (0.0032)	0.0014 (0.0022)	0.0031 (0.0031)	0.0003 (0.0021)
Positive reciprocity	0.0004 (0.0006)	0.0002 (0.0004)	-0.0001 (0.0005)	0.0001 (0.0004)	0.0000 (0.0005)	0.0001 (0.0003)
Negative reciprocity	0.0090** (0.0034)	0.0083*** (0.0025)	0.0027 (0.0031)	0.0013 (0.0021)	0.0031 (0.0030)	0.0003 (0.0020)
External locus of control	0.0028 (0.0022)	0.0033 (0.0025)	0.0025 (0.0020)	0.0023 (0.0018)	0.0022 (0.0018)	0.0020 (0.0015)
Willingness to take risks	0.0018 (0.0035)	0.0059* (0.0026)	0.0025 (0.0033)	0.0034 (0.0024)	-0.0009 (0.0032)	0.0038+ (0.0023)
Age			-0.0165*** (0.0035)	-0.0200*** (0.0039)	-0.0089* (0.0038)	-0.0218*** (0.0059)
Parental background			-0.0013 (0.0010)	-0.0003 (0.0007)	-0.0010 (0.0009)	-0.0001 (0.0006)
Current family situation			0.0165* (0.0069)	-0.0289*** (0.0042)	0.0104 (0.0066)	-0.0253*** (0.0041)
Education (years)			0.0177*** (0.0042)	0.0201*** (0.0045)	0.0173*** (0.0041)	0.0168*** (0.0039)
Labor market career					-0.0312*** (0.0070)	-0.0065 (0.0084)

Standard errors in parentheses. ***/**/*/+ denote significance on the 0.1%, 1%, 5% and 10% level respectively. Full estimation results are available from the author on request.

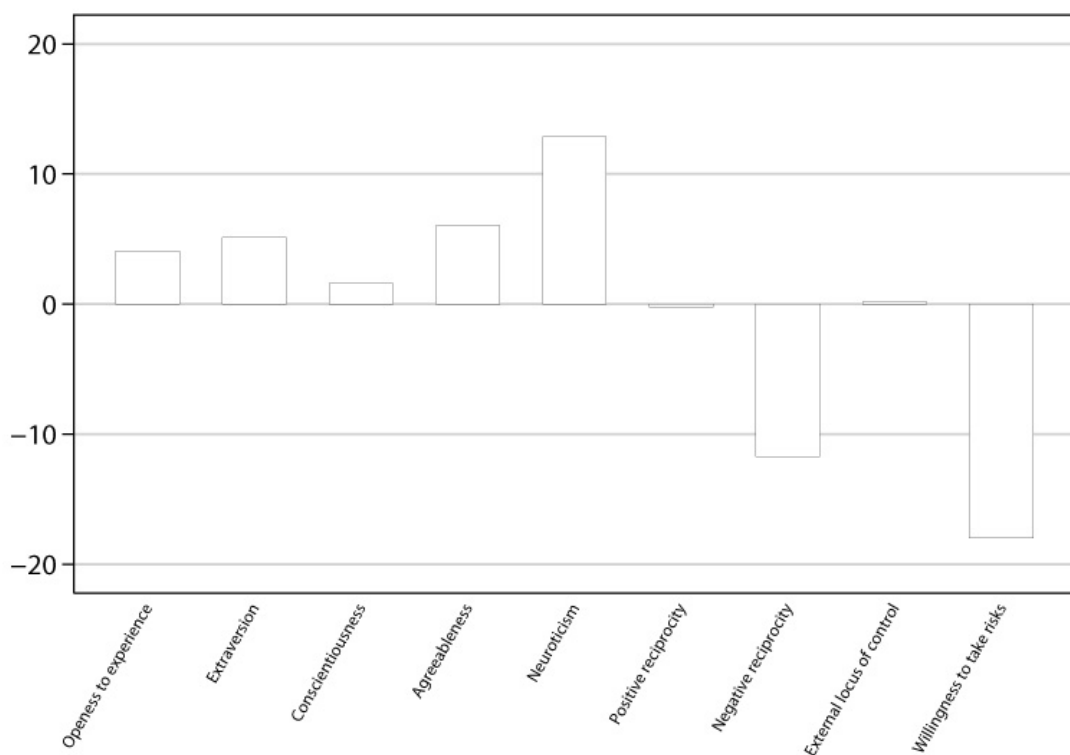


FIGURE 1: PERCENTAGE DIFFERENCES IN MEAN TRAITS BETWEEN MEN AND WOMEN

The bars represent the percentage difference between mean values of women relative to men, calculated as $((\text{Value women})/(\text{Value Men}) * 100) - 100$.

Working Paper Series in Economics

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

- No.111: *Alexander Vogel*: Exporter Performance in the German Business Services Sector: First Evidence from the Services Statistics Panel. January 2009
- No.110: *Joachim Wagner*: Wer wird subventioniert? Subventionen in deutschen Industrieunternehmen 1999 – 2006. Januar 2009
- No.109: *Martin F. Quaas, Stefan Baumgärtner, Sandra Derissen, and Sebastian Strunz*: Institutions and preferences determine resilience of ecological-economic systems. December 2008
- No.108: *Maik Heinemann*: Messung und Darstellung von Ungleichheit. November 2008
- No.107: *Claus Schnabel & Joachim Wagner*: Union Membership and Age: The inverted U-shape hypothesis under test. November 2008
- No.106: *Alexander Vogel & Joachim Wagner*: Higher Productivity in Importing German Manufacturing Firms: Self-selection, Learning from Importing, or Both? November 2008
- No.105: *Markus Groth*: Kosteneffizienter und effektiver Biodiversitätsschutz durch Ausschreibungen und eine ergebnisorientierte Honorierung: Das Modellprojekt „Blühendes Steinburg“. November 2008
- No.104: *Alexander Vogel & Joachim Wagner*: Export, Import und Produktivität wissensintensiver KMUs in Deutschland. Oktober 2008
- No.103: *Christiane Clemens & Maik Heinemann*: On Entrepreneurial Risk – Taking and the Macroeconomic Effects Of Financial Constraints, October 2008
- No.102: *Helmut Fryges & Joachim Wagner*: Exports and Profitability – First Evidence for German Manufacturing Firms. October 2008
- No.101: *Heike Wetzel*: Productivity Growth in European Railways: Technological Progress, Efficiency Change and Scale Effects. October 2008
- No.100: *Henry Sabrowski*: Inflation Expectation Formation of German Consumers: Rational or Adaptive? October 2008
- No.99: *Joachim Wagner*: Produktdifferenzierung in deutschen Industrieunternehmen 1995 – 2004: Ausmaß und Bestimmungsgründe, Oktober 2008
- No.98: *Jan Kranich*: Agglomeration, vertical specialization, and the strength of industrial linkages, September 2008
- No.97: *Joachim Wagner*: Exports and firm characteristics - First evidence from Fractional Probit Panel Estimates, August 2008
- No.96: *Nils Braakmann*: The smoking wage penalty in the United Kingdom: Regression and matching evidence from the British Household Panel Survey, August 2008
- No.95: *Joachim Wagner*: Exportaktivitäten und Rendite in niedersächsischen Industrieunternehmen, August 2008
[publiziert in: Statistische Monatshefte Niedersachsen 62 (2008), 10,552-560]
- No.94: *Joachim Wagner*: Wirken sich Exportaktivitäten positiv auf die Rendite von deutschen Industrieunternehmen aus?, August 2008
[publiziert in: Wirtschaftsdienst, 88 (2008) 10, 690-696]

- No.93: *Claus Schnabel & Joachim Wagner*: The aging of the unions in West Germany, 1980-2006, August 2008
[forthcoming in: Jahrbücher für Nationalökonomie und Statistik]
- No.92: *Alexander Vogel and Stefan Dittrich*: The German turnover tax statistics panels, August 2008
[published in: Schmollers Jahrbuch 128 (2008), 4, 661-670]
- No.91: *Nils Braakmann*: Crime does pay (at least when it's violent!) – On the compensating wage differentials of high regional crime levels, July 2008
- No.90: *Nils Braakmann*: Fields of training, plant characteristics and the gender wage gap in entry wages among skilled workers – Evidence from German administrative data, July 2008
- 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 and 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
[published in: *Ecological Economics* 67 (2008), 3, 384-393]
- 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: *Wirtschaftsdienst* 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
[forthcoming in: *Review of World Economics* 144 (2008), 4]
- No.64: *Lena Koller, Claus Schnabel und Joachim Wagner*: Freistellung von Betriebsräten – Eine Beschäftigungsbremse?, November 2007
[publiziert in: *Zeitschrift für Arbeitsmarktforschung*, 41 (2008), 2/3, 305-326]
- 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
[published in: A. Kontoleon, U. Pascual and M. Smale (eds.): *Agrobiodiversity, conservation and economic development*, Routledge, London, 293-317]
- 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 Wagner*: 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, 9-24]
- 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
[publiziert in: AStA – Wirtschafts- und Sozialwirtschaftliches Archiv 2 (2008), 3, 209-221]
- No.50: *Stefan Baumgärtner, Frank Jöst und Ralph Winkler*: Optimal dynamic scale and structure of a multi-pollution economy, May 2007
[forthcoming in: Ecological Economics]
- 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
[publiziert in: Perspektiven der Wirtschaftspolitik 9 (2008), 3, 329-349]
- 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
[forthcoming in: German Economic Review]
- 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
[forthcoming in: International Economics and Economic Policy]
- 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
[revised version forthcoming as "The impact of September 11th, 2001 on the employment prospects of Arabs and Muslims in the German labor market" in Jahrbücher für Nationalökonomie und Statistik / Journal of Economics and Statistics]
- 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
[published in: Ecological Economics 65 (2008), 2, 397-406]
- 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: *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 and 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
[published in: Applied Economics Letters 15 (2008), 727-730]
- 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