Friedrich-Alexander-Universität Erlangen-Nürnberg

Institute for Employment Research



The Research Institute of the Federal Employment Agency

Effects of Double Qualifications on Various Aspects of Individual Careers in Germany

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Motivation

- 1. Front-loaded education systems
- 2. Individuals' educational paths
 - role of uncertainty
 - change of field of interest
 - study conditions



Abitur holders with a new vocational training contract and new trainees with Abitur 1995-2005 (as percentages)



Source: IWD 2007



Failing during their studies





Failing during their studies 2006



Source: 2. Nationaler Bildungsbericht 2008



Research question

What are the effects of DQ on earnings, job satisfaction and upward mobility?

Paper uses data from the BiBB/BAuA Employment Survey 2005/2006 with information about

- Iong and complex educational paths
- Abitur mark, content of training and degree course



Agenda

- 1. Introduction
- 2. Previous research
- 3. Hypotheses
- 4. Data & descriptives
- 5. Results of multivariate analyses
- 6. Summary
- 7. Research Perspectives



2. Previous research

- Motives of DQ: Lewin et al 1996, Herget 1997, Ulrich et al. 1997, Jacob 2004, Hammen 2009, Bellmann/Janik 2008, 2010
- Earnings effects: Büchel/Helberger 1995, Lewin/Minks/Uhde 1996, Bellmann et al. 1996, Hammen 2008, 2009



3. Hypotheses

- 1. DQ mean more options
- 2. DQ are part of "armament race" among students
- 3. DQ are the result of insurance strategies
- 4. DQ are related to the vocational training course with regard to the content



4. BiBB/BAuA Employment Survey 2005/2006

- CATI survey conducted by TNS Infratest Social Research
- population: employees older than 14 years (without apprentices)
- regular work with more than 10 hours/week
- sample consists of 20,000 persons
- average duration of an interview: 40 minutes
- response rate: 44 %
- for more information: www.bibb.de/arbeit-im-wandel



Overall job satisfaction and DQ





Results



Table 1: Log wage of academics, treatment regressions by gender

	Women	Men
DQ (1 = yes)	-0.137	-0.422***
DQ * years of experience	0.003	0.001
Years of experience	0.027***	0.030***
Years of experience squared	-0.001***	-0.001***
Tenure in years	0.009***	0.007***
Number of direct subordinates	7.88e-07***	3.83e-06**
Not / little satisfied (1 = yes)	-0.084*	-0.122***
Very satisfied (1 = yes)	0.068**	0.045**
Constant	2.017***	2.412***
# Observations	1,283	1,725

reference category of dummy variable group: satisfied.



Table 2: Probability of an academic having DQ (1=yes), probit regressions by gender, marginal effects

	Women	Men
Abimark good (1 = yes)	-0.047	-0.043
Abimark very good (1 = yes)	-0.101***	-0.071*
Technical degree course (1 = yes)	0.230***	0.231***
Degree course in sciences (1 = yes)	0.167***	0.180***
Other field of study (1 = yes)	0.170***	0.106**
# Observations	1,353	1,803
Joint significance of dummy variable groups	Abimark**, field of studies***	Abimark**, field of studies***

reference categories of dummy variable groups: Abimark fair / satisfactory, health / social studies.



Table 3: Overall job satisfaction of academics

(1 = not / little satisfied, 2 = satisfied, 3 = very satisfied), ordered probit regressions by gender

	Women	Men
DQ (1 = yes)	2.900***	8.580***
Predicted probability for having DQ	-0.380	0.769
Log of hourly wage	33.657***	21.366***
Log of residual wage	33.810***	21.694***
Age	-0.006	-0.053
Age squared	0.000	0.001
Years of experience	-0.874***	-0.657***
Years of experience squared	0.019***	0.013***
Tenure in years	-0.310***	-0.157***
Number of direct subordinates	-0.005	-0.006**
# Observations	748	1,108



Table 4: Effect of the DQ dummy on various dimensions of job satisfaction; ordered probit regressions

(1 = not / little satisfied, 2 = satisfied, 3 = very satisfied), by gender, all other variables suppressed

Job satisfaction with	Women	Men
Wage	0.182	2.167***
Career opportunities	0.174	1.739***
Working time	0.497***	1.122***
Work climate	0.639***	2.431***
Boss	0.552***	2.120***
Own function in the firm	0.670***	2.670***
Working/office rooms	0.203	1.009***
Application of ones own skills	0.779***	2.357***
Further training	0.668***	2.001***
Working equipment	0.298**	0.959***
Physical working conditions	0.776***	1.866***
# Observations	748	1,108



Table 5: Probability of academics getting a managerial position

(0 = skilled job, 1 = managerial job),

probit regressions by gender, marginal effects

	Women	Men
DQ (1 = yes)	-0.044	-0.005
Predicted probability for having DQ	-0.136	-0.654**
Age	0.011	0.042
Age squared	-0.000	-0.001*
Foreigner (1 = yes)	0.089	0.064
Mother tongue German (1 = yes)	0.151***	0.249***
Years of experience	0.020**	0.027***
Years of experience squared	-0.000	-0.000
Tenure in years	-0.001	0.000
# Observations	744	1,108



6. Summary

- - 1. 24 % of all Abitur holders conduct DQ (2005).
 - Good Abitur marks and related vocational courses and academic fields of study are associated with DQ.
- DQ exert negative effects on earnings and the probability of getting a managerial position – only for men.



6. Summary (continued)

4. DQ increase overall job satisfaction.
5. Results (2) and (3) corroborate the insurance hypothesis, whereas result (4) corroborates the hypotheses that DQ mean more options and improve the competitive position.



7. Research perspectives

- Additional investigations are needed
- Special panel surveys
- Employment Statistics Register
- National Education Panel Survey