Gutenberg School of Management and Economics

Chair of Applied Statistics and Econometrics

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Bachelor Seminar
SoSe 2022
in Applied Statistics and Econometrics
Empirical Labor Economics

General Description

The bachelor seminar serves as a preparation for the bachelor thesis, which is written directly after the seminar. During the processing period, students are expected to write an exposé of their bachelor thesis and to present it at the seminar. The aim of the seminar and of the bachelor thesis is to enable students to conduct an empirical analysis applying the statistical and econometric skills obtained throughout the bachelor program.

In the course of the seminar, students are expected

- to become familiar with the literature from the relevant field
- to precisely define the research question to be analysed in the bachelor thesis
- to prepare the data for the bachelor thesis
- to present first regression estimates
- to present an outlook for the bachelor thesis (i.e., students specify which further analysis they intend to carry out)

Requirements

While knowledge from the obligatory lectures *Statistik I, Statistik II,* and *Empirische Wirtschaftsforschung* is required, further statistical skills are not necessary. Instead, general interest in statistics and empirical economics and the willingness to conduct one's own empirical analysis as well as basic knowledge of Stata are essential.

Please note that the seminar will be held in English.

Contact

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Topics Overview

Students are expected to investigate empirically the following topics, based on the cited references:

1. Wage Effects of Personality Traits in Germany
2. Do the working poor stay poor?
3. Gender differences in internal Promotions
4. The wage penalty of part-time jobs and temporary jobs
5. Part-time work and job satisfaction of women
6. Gender differences in Multiple Job Holding (MJH)

Detailed Topics and Literature

1. Wage Effects of Personality Traits in Germany

Heineck (2011) uses the British BHPS to estimate the impact of the Big Five personality traits on wages. He finds that openness to experience has a positive effect on wages whereas agreeableness and neuroticism have negative effects. He also shows that the effects do not change when tenure increases. He estimates simple OLS regressions as well as Panel and IV regressions.

Students are expected to assess if the results obtained for Great Britain also hold for Germany. They estimate Pooled OLS regressions, separately for men and women. In a second step they analyze if the effects depend on tenure.

Literature

Heckman, J. J. and Kautz, T. (2012), Hard evidence on soft skills, Labour Economics 19, 451-464.

Heineck, G. (2011), Does it pay to be nice? Personality and Earnings in the United Kingdom, Industrial and Labor Relations Review 64(5), 1020-1038.

2. Do the working poor stay poor?

In the last decade, the proportion of low-wage earners in Germany has grown significantly whereas the proportion of unemployed workers has decreased. In order to assess this development, it is important to know if being a low-wage employee is a dead-end or if there are chances to move to better paid jobs.

In a first step, the seminar thesis describes descriptively short-term and long-term transition probabilities between low-wage employment, middle-wage employment and high-wage-employment. In a second step, linear probability models (estimated by OLS) or Logit models are applied to identify characteristics which improve chances to obtain a better-paid job.

Literature

Mosthaf, A., Schnabel, C., Stephani, J. (2011), Low-wage careers: Are there dead-end firms and dead-end jobs? Journal for Labour Market Research, 43(3), 231-249.

Stewart, M. B. and Swaffield, J. K., (1999), Low pay dynamics and transition probabilities, Economica 66, 23-42

3. Gender differences in internal Promotions

Only a small share of management positions in German firms is filled by women – a result of a lower probability of women getting promoted. There are different explanations for the lower career chances of women. Employers may discriminate against women, or the labor supply of women for leading positions may be lower. The topic analyzes determinants of promotions, thereby focusing on gender differences. Promotions cannot be identified directly in the GSOEP. Students will first analyze the employees' expectations of being promoted within the next two years using OLS regressions and focus on gender differences. In a second step, students use OLS or Probit regressions to analyze the probability of a significant wage increase within two years when staying in the same firm. It will be interesting to see differences between the gender gaps in the expectation of promotion and in realized promotions.

Literature

Booth, A. L., Francesconi, M., & Frank, J. (2003). A sticky floors model of promotion, pay, and gender. European Economic Review, 47(2), 295-322.

4. The wage penalty of part-time jobs and temporary jobs

The share of part-time jobs and temporary jobs has grown in Germany in the last decades. While part-time work allows more flexibility both for the worker and the employer, temporary jobs mainly allow more flexibility for employers. Additionally, employees can be screened when they have a fixed-term contract before they get a permanent contract. The economic literature has often argued that part-time jobs and temporary jobs are jobs of low-quality and incur lower wages than permanent full-time positions. The seminar thesis uses OLS and Fixed Effects wage regressions to estimate the wage penalty of part-time jobs and temporary jobs. As the share of men working in part-time positions is low, the analysis is restricted to women.

Literature

Kranz-Fernandez, Daniel, Rodriguez-Planas, Nuria (2011), The part-time pay penalty in a segmented labor market, Labour Economics 18(5), 591-606.

Manning, A., Petrongolo, B. (2008), The part-time pay penalty for women in Britain, The Economic Journal 118, F28-F51.

5. Part-time work and job satisfaction of women

A large part of the female labor force in Germany is working part-time. The prevalence of part-time work is ambivalent. On the one hand, a lot of women work voluntarily part-time and would not participate in the labor market if the possibility of working part-time would not exist. On the other hand, working part-time decreases career prospects of women compared to working full-time. The latter may be explained by a lower job quality of part-time jobs compared to full-time jobs. The seminar paper analyzes descriptively which share of female workers is affected by working hours mismatch, distinguishing between women working part-time and women working full-time. OLS or Probit regressions are used to estimate the relationship between working hours and the probability of wanting more or wanting less working hours for women (Booth, van Ours, 2013, p. 275 f.). Furthermore, OLS and Fixed Effects regressions are used to estimate the relationship between working hours and job and life satisfaction.

Literature

Booth, A., van Ours, Jan C. (2013), Part-time jobs: what women want? Journal of Population Economics 26(1), 263-283.

Clark, A. (1996), Job satisfaction in Britain, British Journal of Industrial Relations 34, 189-217.

6. Gender differences in Multiple Job Holding (MJH)

Determining individuals' motives to follow MJH became more and more relevant in labor market research over the past decades. Possible determinants differ across labor markets and labor market regimes. However, studies for the German labor market are scarce despite an observable increasing trend of MJH rates over the last 20 years. MJH-rates for women increased faster than for men, resulting in an average gap of c. 1.3 pp in MJH-rates between gender for the years 2016 to 2019 (Eurostat). Hence, it is interesting whether determinants, which are commonly used in MJH literature, can explain the difference of MJH-rates between gender.

Therefore, Preston & Wright (2020) tried to understand important determinants to follow MJH for the Australian labor market, firstly, by estimating a Probit Model based on the HILDA survey separately for women and men. Secondly, they used an Oaxaca-Blinder Decomposition to show which determinants might explain the gap in MJH rates between gender. Students are expected to do a similar analysis using GSOEP data, by estimating OLS with a binary dependent variable (Stock & Watson, 2014; ch. 11) and subsequently decomposing the results by gender – Borjas (2016) provides a good introductory example for the Oaxaca-Blinder Decomposition in chapter 9-8.

Literature

Borjas, G.J. (2016), Labor Economics, Seventh Edition, McGraw-Hill Education, p. 382-387

Preston, A. and Wright, R.E. (2020), Exploring the gender difference in multiple job holding, Industrial Relations Journal, Wiley Blackwell, vol. 51(4), p. 301-328

Stock, J.H. and Watson, M.M. (2019), Introduction to Econometrics, 4th Edition, Pearson, p. 392-426

Organisation of the Seminar

You can apply for the seminar via Jogustine. Further information on the registration procedure and the registration period is provided by the *Studienbüro.* You will receive final admission to the seminar from the *Studienbüro.*

All topics will be assigned to groups of two or three students directly after the first meeting (Tuesday, May 31st). Please send a transcript from Jogustine to

sekretariat.schank@uni-mainz.de prior to the first meeting in order to inform us of which courses you have participated in.

Group members present their results jointly on Thursday, July 14th. However, note that each student writes her / his exposé independently. The bachelor thesis will be written in the eight weeks following the seminar.

Time Schedule for the Bachelor Seminar and Bachelor Thesis

Events	Date	Time	
Introduction of the topics, topic assignment and beginning of the processing period	Tuesday, May 31st 2022	14:00-16:00	HS VI (in building ReWi II Altbau)
Deadline for exposés submission	Thursday, July 7th 2022	until 12:00	Via e-mail to: sekretariat.schank@uni-mainz.de.
Presentation of the exposés	Thursday, July 14th 2022	9:00-18:00	HS VII (in building ReWi II Altbau)
Beginning of processing time of the bachelor thesis	Friday, July 15th 2022	–	–
Deadline for bachelor thesis submission	Friday, September 9th 2022	until 23:59	Official submission to the Studienbüro. Supplementary material via e-mail to sekretariat.schank@uni-mainz.de

The attendance of the introductory session (first session) and the presentation of the exposés are mandatory. In the case of non-attendance (without presenting valid reasons to the Exam Office), the seminar will not be passed. Depending on the Corona situation, the introductory session and the exposé presentation (as well as the meetings with the supervisor) might be held in digital mode via video conferences (MS Teams).