Bachelor Seminar
SoSe 2023
in Applied Statistics and Econometrics
Empirical Labor Economics

Gutenberg School of Management and Economics

Chair of Applied Statistics and Econometrics

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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.

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Topics Overview

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

1. Do personality traits explain the gender wage gap?
2. Overeducation and job satisfaction
3. The wage penalty of motherhood
4. Do the working poor stay poor?
5. Part-time work and job satisfaction of women
6. Determinants of east-west migration in Germany

Detailed Topics and Literature

1 Do personality traits explain the gender wage gap?

There is a large literature seeking the reasons behind the persistent gender wage gap. Most studies investigate the differences in job characteristics or cognitive skills among men and women, but less attention is paid to the psychological traits of workers. For example, are women more likely than men to be agreeable, and would a more agreeable person receive a wage penalty in the labor market?

This topic investigates whether personality traits can contribute to explaining the gender wage gap. We use variables of the big five factors of personality and locus of control. The estimation methods are Pooled OLS regressions and an Oaxaca-Blinder decomposition.

Literature

Nyhus, E. K., & Pons, E. (2012). Personality and the gender wage gap. Applied Economics, 44(1), 105-118.

2 Overeducation and job satisfaction

With higher educational attainment, workers may experience education-job mismatch, i.e., overeducation, which means that the worker obtains a level of education in excess of that which is required for their particular job. Some previous studies show that overeducated

workers are less satisfied with their job, and an education-job mismatch leads to lower productivity and profit for firms. In this topic, we are interested in whether overeducation leads to a reduction in job satisfaction in Germany. Students are expected to use Pooled OLS regressions and Logit models to conduct the analysis.

Literature

Bauer, T. K. (2002). Educational mismatch and wages: a panel analysis. Economics of Education Review, 21(3), 221-229.

3 The wage penalty of motherhood

Employed mothers often experience additional wage losses compared to non-mothers, which is called the wage penalty for motherhood. This kind of wage disadvantage is also an essential component of the gender wage gap. The mechanisms driving mothers' wage disadvantages have already been the subject of much research. Usually, motherhood leads to job interruption due to childbirth and more time spent taking care of children. Besides that, it is worth analyzing if there exist other reasons for the wage penalty for motherhood, and based on these factors, how policymakers should react to support mothers in the labor market.

This topic focuses on the relationship between motherhood and women's labor market income using OLS and Fixed Effects regressions.

Literature

Budig, M. J. (2001). The Wage Penalty for Motherhood. American Sociological Review, 66-Number 2, 204-225.

4 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

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 Determinants of east-west migration in Germany

Though, the reunification of Germany dates back more than a quarter of a century, economic disparities between both regions are still viable. One reason is probably that more people left East- for West-Germany which may have weakened respective labor market and economic performance. In addition, Fuchs-Schündeln & Schündeln (2009) found that migrants to West-Germany are mainly young, educated people while people who return to East-Germany are mainly old or single. However, a recent shift in moving behaviour is observable, resulting in

net migration gains for eastern Germany since 2017. Therefore, it is interesting to re-evaluate determinants for leaving and/-or returning to Eastern Germany in the manner of Fuchs-Schündeln & Schündeln (2009). To estimate respective determinants students are expected to use the GSOEP by facilitating OLS and Fixed Effects regression. Extensions are possible by either using Probit or, if interested in migration flows, OLS or Poisson regressions.

Literature

Fuchs-Schündeln, N. & Schündeln, M. (2009), Who stays, who goes, who returns? East-West Migration within Germany since reunification. Economics of Transition, 17, 703-738.

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 (Thursday, May 2nd). 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, June 15th. 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	Thursday, May 2nd 2023	16:00-18:00	RW 6 (in building ReWi I)
Deadline for exposés submission	Thursday, June 8th 2023	until 12:00	Via e-mail to: sekretariat.schank@uni-mainz.de.
Presentation of the exposés	Thursday, June 15th 2023	9:00-18:00	RW 6 (in building ReWi I)
Beginning of processing time of the bachelor thesis	Friday, July 16th 2023	–	–
Deadline for bachelor thesis submission	Friday, August 11th 2023	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.