



Bachelor Seminar SS2021

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. Do personality traits explain the gender wage gap?
2. The impact of health on wages
3. Gender differences in internal promotions
4. Unemployment and life satisfaction
5. Overeducation and career mobility
6. Do immigrants participate less in on-the-job training?

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. The impact of health on wages

Traditionally, the human capital theory focuses on the education and skills of individuals. However, health is also an essential component of human capital. There are several potential channels through which health could have an impact on labor market behavior and outcomes. An increase in health leads to an increase in productivity and, therefore, wages. Moreover, unhealthy workers may be subject to discrimination irrespective of their productivity. And health might correlate with unobserved attributes that affect productivity. Consequently, firms may offer higher wages for healthier workers.

This topic aims to investigate whether health has a positive impact on wages. The main independent variable is self-assessed health status. The methods used are Pooled OLS and Fixed Effects regressions.

Literature

Pelkowski, J. M., & Berger, M. C. (2004). The impact of health on employment, wages, and hours worked over the life cycle. *The Quarterly Review of Economics and Finance*, 44(1), 102-121.

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. Unemployment and life satisfaction

Labour market success is known to have an impact on life satisfaction. Economists are also interested in the relationship between labor force status and happiness. It is found that unemployment has significant negative effects on life satisfaction due to loss of social contact, reduced self-esteem, and fall in future discounted wages. However, from another perspective, happiness is increasing with increased leisure. Therefore, the total effect of unemployment on life satisfaction may be ambiguous. Students are expected to run pooled OLS and Fixed Effects regressions in the seminar thesis to estimate the effect of unemployment on life satisfaction by using more current SOEP data.

Literature

Kassenboehmer, S. C., & Haisken - DeNew, J. P. (2009). You're fired! The causal negative effect of entry unemployment on life satisfaction. *The Economic Journal*, 119(536), 448-462.

5. Overeducation and career mobility

Overeducation refers to an education-job mismatch where the worker obtains a level of education in excess of that which is required for their particular job. Some previous studies showed that overeducated workers might change their jobs more frequently than their adequately matched counterparts. On the one hand, according to occupational mobility theory, labor market entrants may treat overeducation as an investment in exchange for work experience and training which provides greater promotional opportunities in the future. On the other hand, overeducation might be a signal of relative lower productivity and results in downward occupational mobility. In this topic, students study the relationship between overeducation and occupational mobility and are expected to use LPM regressions and Logit regressions to conduct the analysis.

Literature

Rubb, S. (2013). Overeducation, undereducation and asymmetric information in occupational mobility. *Applied Economics*, 45(6), 741-751.

6. Do immigrants participate less in on-the-job training?

With large immigrant inflows to Germany, on-the-job training, which provides local-specific human capital, is essential to immigrants' labor market integration and success. However, workers with an immigration background might face unequal chances to attend training comparing with natives. The potential reasons could be that employers may expect the outcomes of training for immigrants to be lower than training for natives if employers believe that the language barriers will reduce the training outcomes or that immigrants may only stay temporarily in the host country.

This topic aims to detect differences in training participation between immigrants and natives and the potential reasons for this phenomenon. The estimation methods are OLS regressions or Logit regressions.

Literature

Barrett, A., McGuinness, S., O'Brien, M., & O'Connell, P. (2013). Immigrants and employer-provided training. *Journal of Labor Research*, 34(1), 52-78.

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 receive the 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 6th). 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 17th. 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 6 th 2021	10:15- 11:45	Via Microsoft Teams
Deadline for exposés submission	Friday, June 11 th 2021	until 12:00	Via e-mail to: sekretariat.schank@uni-mainz.de .
Presentation of the exposés	Thursday, June 17 th 2021	9:00- 18:00	Via Microsoft Teams
Beginning of processing time of the bachelor thesis	Friday, June 18 th 2021	–	–
Deadline for bachelor thesis submission	Friday, August 13 th 2021	until 12:00	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. Due to the Corona situation, the introductory session and the exposé presentation (as well as the meetings with the supervisor) will take place via video conferences.