



**Bachelor Seminar  
WS 2022-2023  
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 empirically investigate research questions from labor economics like "are there gender differences in internal promotions" or "does housework affect wages", using the Software package Stata. During the seminar, students are expected to

- become familiar with the literature from the relevant field
- precisely define the research question to be analysed in the bachelor thesis
- prepare the data for the bachelor thesis
- present first regression estimates
- 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 knowledge of Stata are essential. Further information can be found on our homepage:

<https://www.statistics.economics.uni-mainz.de/teaching/bachelor/seminar/>

For further questions, feel free to contact Carl Hase ([cahase@uni-mainz.de](mailto:cahase@uni-mainz.de))

**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. Ethnicity and job satisfaction
2. Gender differences in internal promotions
3. Overeducation and career mobility
4. Do immigrants participate less in on-the-job training?
5. The effect of household work on wages

## Detailed Topics and Literature

### 1. Ethnicity and job satisfaction

A large literature examines the relationship between various demographic traits and job satisfaction. For example, researchers have found that despite lower pay and fewer opportunities for advancement---perhaps due to discrimination---women tend to be more satisfied with their jobs. This could be due to differences in values, job expectations, or labor force participation rates. Yet, there is little evidence on whether job satisfaction differs by ethnicity or migration status. Moreover, with large immigrant inflows, Germany's labor market is rapidly diversifying, and job satisfaction may be crucial to migrants' overall integration into society.

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

## Literature

Hersch, J., & Xiao, J. (2016). Sex, Race, and Job Satisfaction Among Highly Educated Workers. *Southern Economic Journal*, 83(1), 1-24. DOI: 10.1002/soej.12133

## 2. 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.

## 3. 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.

### 4. 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.

### 5. The effect of household work on wages

How much time individuals spend on household work may affect their wages. When employers decide on hiring workers, they might consider that higher household working hours could decrease an employee's effort in the workplace. The question then arises whether household work reduces a worker's wage. Previous studies also show that women spend significantly more time on household work than men worldwide. Household work might be a potential factor that causes gender differentials in wages. Therefore, it is also interesting to examine whether household work affects the wages of married men and women differently. Students are expected to use OLS and Fixed Effects regressions to investigate these issues.

## Literature

Bryan, M. L., & Sevilla-Sanz, A. (2011). Does housework lower wages? Evidence for Britain. *Oxford Economic Papers*, 63(1), 187-210.

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## 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 (Wednesday, November 2<sup>nd</sup>). Please send a transcript from Jogustine to [sekretariat.schank@uni-mainz.de](mailto:sekretariat.schank@uni-mainz.de) prior to the first meeting to inform us of which courses you have participated in.

Group members present their results jointly on Thursday, December 8<sup>th</sup>. 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	Wednesday, November 2 <sup>nd</sup> 2022	16:00- 17:30	HS VI in building ReWi Alt
Deadline for exposés submission	Thursday, December 1 <sup>st</sup> 2022	until 12:00	Via e-mail to: <a href="mailto:sekretariat.schank@uni-mainz.de">sekretariat.schank@uni-mainz.de</a> .
Presentation of the exposés	Thursday, December 8 <sup>th</sup> 2022	9:00- 18:00	Rote Infobox
Beginning of processing time of the bachelor thesis	Friday, December 9 <sup>th</sup> 2022	–	–
Deadline for bachelor thesis submission	Friday, February 3 <sup>rd</sup> 2023	until 12:00	Official submission to the Studienbüro. Supplementary material via e-mail to <a href="mailto:sekretariat.schank@uni-mainz.de">sekretariat.schank@uni-mainz.de</a>

**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.**