



## Exercise 5

### Social Inequality

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**Instruction:** We will complete the exercise in class. If you want feedback, you are welcome to upload the completed exercise on moodle by March, 19 2024.

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**Data preparation:** Download the data for Exercise 5 from moodle (SOEP.dta). The data includes respondents aged 20-53 from the campus file of the German Socio-Economic Panel (GSOEP).

The reference group are German national born in Germany (MIG=1). Select a comparison population of your choice:

- Team 1a: Female foreign migrants (MIG=2) in 1990
- Team 1b: Female foreign migrants (MIG=2) in 2000
- Team 1c: Female foreign migrants (MIG=2) in 2019
  
- Team 2a: Male foreign migrants (MIG=2) in 1990
- Team 2b: Male foreign migrants (MIG=2) in 2000
- Team 2c: Male foreign migrants (MIG=2) in 2019
  
- Team 3a: Female refugees (MIG=3)<sup>1</sup>
- Team 3b: Male refugees (MIG=3)<sup>2</sup>

#### 5.1

- a) Estimate the following wage equation with log of the hourly wage as outcome variable. Plot the “assimilation profile” in a figure.

$$\text{LOG(WAGE)} = \beta_0 + \beta_2 \text{AGE} + \beta_3 \text{MIG} + \beta_4 \text{DUR} + \beta_5 \text{DUR}^2$$

- b) Do the results support the idea that migrants assimilate into the German labor market over time? To what extent do cohort effects matter for the interpretation of the results? Which other aspects are relevant to consider?

#### 5.2

- a) Calculate the following indicators for migrants and natives: employment rate, mean hourly wage, mean years of schooling, mean age.
- b) Estimate a wage equation with hourly log wage as dependent and age (AGE), age squared (AGE2) and years of schooling (SCHOOLING) as independent variables. Estimate separate models for migrants and natives. Is migrant's endowment remunerated on the German labor market? Discuss!

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<sup>1</sup> Pool the years 2016-2019, if you are studying refugees.

<sup>2</sup> See footnote 1