Instructions:

The code was run on Gauss 7 (Windows). The code and data zip file contains 8 .prg files, which are described below. The folder \Estimation contains the estimation code (6 .prg files), while the folder \Results contains the code (2 .prg files) used to produce the estimation and simulation results. The zip file also includes the data used in the estimation (data.txt).

The zip file needs to be unzipped into a new directory.

Estimation files (to be compiled in the order below):

1) loading.prg: loads the data and saves the covariates in the file D:\Data.dat (to be changed to the desired folder name).
2) estim_start.prg: generates the variables, as well as the parameter starting values, used in the estimation.
3) proc.prg: procedures called in the estimation of the model.
4) estim.prg: main estimation file.

Note: need to run 1)-4) several times to avoid local optima in the EM estimation (20 different starting points used in the paper).

5) bootstrap_draw.prg: draws a set of values for the dependent variables (parametric bootstrap procedure).
6) bootstrap.prg: bootstrap estimation (50 repetitions).

Results files:

1) estimation_results.prg: computes bootstrap estimates (mean and standard deviation for each parameter).
2) simulation.prg: runs a set of counterfactual simulations (used to produce Tables 4-6 in the paper).

Codebook:

Covariates:

ca9c: father's occupation
ca10c: mother's occupation
idf: Paris region
q1num: gender
ages: age in sixth grade
q36agr: high school graduation track
ratio: proportion of students in the first two years of college
year: year of entry into the labor market
par_nat : parent nationality

abroad : born abroad

Dependent variables:

univ: college major
length: length of studies
meanw: log-average monthly earnings