Panel Data Estimators: Problems

Suppose that our dependent variable is the median earnings of college graduates five years after graduation. We have data for all the NESCAC schools for all graduating classes from 1990 to 2007. Our data also includes U.S. GDP, and each school's endowment.

1. Why might we include time fixed effects in our specification.

2. Why might we include school fixed effects in our specification?

3. What do you think the estimated school dummy regression coefficients for Bates will be as as opposed to Bowdoin?

4. Under what conditions is pooled OLS appropriate?

5. How might you test fixed vs. random effects?

6. How might you test fixed effects vs. pooled OLS?

7. True or False? Fixed effects is just OLS with a bunch of dummy variables added to the specification.

8. True or False? Random effects is just OLS where we also exploit the potential correlations of the error terms.

9. Suppose that we believe that Amherst and Williams offer an identical education. How might we more efficiently run fixed effects?