

Lab -Week 5

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Endogeneity

Reproduce the model done in class and carry out the three tests from scratch and using the automatic testing component.

- 1) Load mroz from POE5Rdata, which is 1975 PSID data
- 2) Isolate only those who worked in 1975
- 3) Carry out the preliminary assessment of the following:

$$\log(WAGE) = \beta_0 + \beta_1 EDUC + \beta_2 EXPER + \beta_3 EXPER^2 + e$$

- 4) Now, use father's education as an instrument. Do it using both the two stage method and the inbuilt IV method. Produce the diagnostics. Notice any similarities?
- 5) Test it using the Weak Instrument test
- 6) What are the results of the Hausman test
- 7) What about the Sargan test? Did you get a result? Interpret.