

ECON 861; WINTER 2006; C. FERRALL. Assignment #1. FINAL VERSION.

Due Date: present results to me in the RDC during class on Tuesday February 28.

The objective of this assignment is to extract an estimation sample from SLID, the *Survey of Labour and Income Dynamics*, and replicate a small portion of a published piece of research.

Choose either A or B

A. Lifecycle Labour Supply

- ◇ Construct a data set similar to Altonji (1986) from SLID. Consumption and assets are not available, and there is no separate hourly wage equation. Thus, the replication will not look like Altonji's analysis.
- ◇ Use the data to estimate by OLS and IV a model similar to MacCurdy (1981) but based primarily on Keane and Imai (2004) page 24:

$$\Delta \ln(h_t) = \text{Const} + b_2 \Delta \ln(W_t) + \epsilon_t.$$

For the IV estimates, use experience, experience squared and the twice lagged wage as instruments for the wage. The Stata commands `regress` and `ivreg` should be adequate to carry out the work. You may also want to try `xtreg` to compare results between first-difference and fixed-effects estimates (without instruments).

- ◇ Describe the sampling criteria and produce a table of summary statistics for your variables. Report the OLS and IV estimates. Compared them to what is reported in the literature.
- ◇ Bonus: Test the overidentifying restrictions using econometric techniques. Or perhaps construct a table of changes in firm and occupation like Sullivan.

B. Household Labour Supply

- ◇ Construct a data similar to Lundberg (1988) on husbands and wives, either quarterly or annual labor supply.
- ◇ Estimate a set of simultaneous equations similar to Lundberg (1988).
- ◇ Bonus: Construct a sample and estimate a set of wage and labor supply equations similar to Blundell et al. (2002).