Economics 142
Problem Set 7

We will continue to use the data from the Self Sufficiency Program, included in the data set welfare.csv. The variables are:

treatment = 1 if in treatment group, 0 for the control group

imm = 1 if immigrant

hsgrad = 1 if high school graduate (or higher) education

agelt25 =1 if age is 25 or less

age35p = 1 if age is 35 or more

working_at_baseline = 1 if person was working when assigned to treatment/control group

anykidsu6 = 1 if any children under age 6

nevermarried = 1 if never married (all cases are single parents)

FTxx = full time work status at months xx=15, 20, 24, and 48.

Consider the first stage models for the probability of working FT in months 15, 20, 24, 48, using treatment as the instrumental variable, with controls X_i:

$$FT_i = \pi_0 + \pi_1 T_i + \pi_x X_i + \eta_i$$

wheere X_i = {imm, hsgrad, agelt25, age35p, working_at_baseline, anykidsu6, nevermarried}. As in problem set 6 there are separate estimates of (π_0, π_1, π_x) for each of months 15, 20, 24, 48.

1) Estimate the fractions of compliers, always takers and never takers in months 15, 20, 24, 48

2) Using the method from lecture 15, get the means of X_i for the compliers in months 15, 20, 24, 48.