

This data set APPLE.dta in Wooldridge is an interesting example of experimental data (it can suggest ideas for future projects). They are telephone survey data attempting to elicit the demand for a (fictional) ecologically friendly apple. Each family was randomly presented with a set of prices for regular apples and eco-labeled apples. They were asked how many pounds of each kind of apple they would buy. The data set includes the following variables:

Variable Name	Label
educ	years schooling of respondent
regprc	price of regular apples (\$/lbs)
ecoprc	price of ecolabeled apples (\$/lbs)
hhsiz	household size
male	=1 if respondent is male
faminc	family income, thousands \$
ecobuy	=1 if ecolbs > 0
reglbs	quantity regular apples, lbs
ecolbs	quantity ecolabeled apples, lbs

Estimate the following two models:

(I) `reg ecolbs faminc regprc ecoprc hhsiz male educ, robust`

(II) `logit ecobuy faminc regprc ecoprc hhsiz male educ`

- Interpret the parameters on the *faminc*, *regprc*, and *ecoprc* variables from the results of the estimation of model (I).
- Interpret the parameter for household size from the results of the estimation of model (II) [hint: you need to compute the marginal effects].
- For model (II), are *faminc* and *hhsiz* jointly significant at the 5% level? Report results of all estimations, and show all steps in the hypothesis test.