

Homework 3: Binary Choice Models-Heteroscedastic Probit

Run a heteroscedastic probit model using the file `econ.teaching.dta`, available from my website. Compare the results to a standard binary probit model and discuss the implications of potentially mis-specifying this model.

The data in the file `econ.teaching` were used by Spector and Mazzeo (1980) to analyze the effectiveness of a new system of teaching economics, called PSI. The data comprise the following variables:

- `grade` 1 if the student's grade on examination improved after exposure to PSI, 0 otherwise.
- `GPA` Student's grade point average.
- `TUCE` Score on a pretest indicating entering knowledge of the material.
- `PSI` 1 if student was exposed to the new teaching method, 0 otherwise.

Bonus question Install `relogit` from Gary King's website and run a rare events logit model using the data `rare.events.dta`, available from my website. Run a regular logit model and compare/discuss the results of the two models.