

Homework 2: Binary Choice Models

Part 1 Run a logistic regression using any combination of the variables in the data set. Be sure to include a substantive interpretation of the model results including predicted probabilities and first differences.

Part 2 Run a second model using a different specification (i.e. different variables, interactions, squared-terms etc). Compare the model fit to the model in Part 1 using LR-tests, PRE and ROC curves.

The data in the file `turnout.dta` comprise the following variables:

- `turnout` 1 if the respondent reports turning out to vote in the 1984 presidential election, 0 otherwise.
- `educ` 1 for 0 – 4 yrs education, 2 for 5 – 7 yrs; 3 for 8 yrs, 4 for 9 – 11 yrs, 5 for 12 yrs, 6 for 1 – 3 yrs college, 7 for 4 yrs college, 8 for 5+ yrs college.
- `age` age of respondent, in years.
- `south` 1 if respondent lives in the South, 0 otherwise.
- `govelec` 1 if a gubernatorial election coincided with the presidential election, 0 otherwise.
- `closing` number of days before election day that voter registration closes in the respondent's state.