

PUAD 7972: Homework 1

Directions: Download the following [file](#). It contains data from the U.S. Circuit Courts of Appeals. In it, there are 3,363 votes cast by judges on these courts between 1936 and 2010. There are a total of nine variables—seven of which are of substantive interest. (See the codebook below.) Using these data, complete the following prompts.

1. Estimate a logistic regression such that the ideological directionality of a judge's vote is the dependent variable. For independent variables, include the Supreme Court's ideology, whether the case is a habeas corpus petition, whether a judge was appointed by a Democrat, whether the judge is a southerner, the judge's ideology, and the issue area of the case (in dummies) such that criminal cases are the omitted category. Present the results from this regression in a table called, "Table 1." Caption it appropriately. Include in this table coefficients, standard errors, changes in predicted probability, and sample size.
2. Assuming $\alpha = 0.05$ (one-tailed), which variables are statistically significant? Appropriately interpret the effect these variables have on the probability a judge casts a liberal vote. Present graphs for these results in formally captioned figures and discuss what they tell us about the likelihood a judge votes in a liberal direction. Finally, which variables are not statistically significant, and what do these findings tell us about what causes judges to vote either liberally or conservatively?

Codebook: Below, please find variable operationalizations for the dataset used to complete this homework.

- `jid`: A unique, numeric identifier for each judge in the dataset. Note, judges may appear more than once.
- `caseid`: A unique, numeric identifier for each case in the dataset. Most cases are heard by panels consisting of three judges.
- `libvote`: A dichotomous variable taking a value of "1" if a judge's vote was cast in a liberal direction, "0" otherwise.
- `scotus_ideology`: A continuous-level measure of the U.S. Supreme Court's ideology for any given year. The measure is scaled from liberal-to-conservative such that increasing values indicate increasingly conservative institutions.
- `geniss`: A nominal-level variable that assumes a given value based upon the issue involved in a given case.
 - `geniss = 1`: Criminal cases
 - `geniss = 2`: Civil rights cases
 - `geniss = 3`: First Amendment cases
 - `geniss = 4`: Due process cases
 - `geniss = 5`: Privacy rights cases
 - `geniss = 6`: Labor relations cases
 - `geniss = 7`: Economic disputes or regulations cases
- `habeas`: A dichotomous variable taking a value of "1" if a case involves a petition for a writ of habeas corpus.
- `potus_dem`: A dichotomous variable taking a value of "1" if a judge was appointed by a Democratic president and a value of "0" if they were appointed by a Republican.
- `south`: A dichotomous variable taking a value of "1" if a judge is a southerner, "0" otherwise, where southerners are defined as those born in one of the 11 states that seceded during the Civil War.
- `ideology`: A continuous-level measure of a judge's ideology for his or her career. The measure is scaled from liberal-to-conservative such that increasing values indicate increasingly conservative individuals.