

Download the data file “abortion.xls” from D2L. Import it into R.

Use R to answer the following questions. You will need to turn in a printout of your work in R, your plots, and answers for each of the questions listed below. For any hypothesis test, you should provide the hypotheses, critical and calculated values, the decision rule, and the decision.

1. We’re going to estimate the following model:

$$Abort_i = \beta_0 + \beta_1 P_i + \beta_2 Y_i + \beta_3 Picket_i + \varepsilon_i$$

where:

$Abort_i$ =	Number of abortions per 1,000 women ages 15-44 in state i
P_i =	Average price charged in non-hospital facilities for an abortion at 10 weeks with local anesthesia in state i
Y_i =	Disposable personal income in state i
$Picket_i$ =	Percentage of respondents in state i who reported experiencing picketing with physical contact or blocking of patients

2. We would expect β_2 to be positive and β_1 and β_3 to be negative. Test these hypotheses at the 5% level.
3. Perform the Breusch-Pagan test for heteroskedasticity (using a 5% level).
4. Perform the White test for heteroskedasticity (using a 5% level).
5. If you find heteroskedasticity, get White-corrected standard errors and t-statistics for the coefficients in the model.
6. Redo the hypothesis tests you performed in (2) with the White-corrected standard errors.
7. Any changes in your conclusions?