

ECON 5370 – Take Home Quiz #3 (20 pts)

Due: Thursday, March 29, 2018 (at the beginning of class)

Directions. In this assignment, I'm asking you to estimate maximum WTP for curbside recycling. I will be emailing you an Excel data file and a supplementary document that explains the variables from the survey.

A few clarifications about the dataset:

- The variable "THIRD" is a 1 for short cheap talk, 2 for long cheap talk, and 3 for no cheap talk. Cheap talk scripts in non-market valuation surveys are non-binding statements reminding respondents to think about budget constraints and act "as if" the decision is real.
- PAY is the bid given to the respondent where WTP1 is the coded response. A response coded as 1 means "YES", 2 means "NO", and 0 means the person didn't respond or doesn't know.
- HALF is the follow-up bid if the person says "NO" to the opening bid. The variable WTP3 is the coded response for HALF.
- WTP2 is the coded response for a respondent that says "YES" to PAY.
- PREC is how much subjective confidence the respondent has in their WTP response on a scale from 0 to 100, where a "-1" value indicates a "don't know" response.
- All other demographic variables and coded responses are explained in the supplementary document.

Here are the 5 questions you should answer:

- 1) Estimate a simple probit model for the single-bounded dichotomous-choice model. Make sure you have at least 3 explanatory variables and provide an interpretation for each estimated coefficient.
- 2) What is the predicted mean WTP from your model in part (1)? Give three reasons why this predicted value might not be an accurate representation of true WTP.
- 3) Incorporate PREC into your model in a reasonable way and comment on the results.
- 4) Does short cheap talk work? Long cheap talk? Explain.
- 5) Estimate a double-bounded dichotomous-choice model using WTP2 and WTP3. What is the predicted WTP from the model? Based on your model, is curbside recycling an efficient use of society's resources? Explain.