Seminar 4. Multinomial models in Eviews

Task 1. Fishing mode

The application is to choice of fishing mode. The dependent variable *mode* takes value 1, 2, 3, or 4 depending on which of the four mutually exclusive alternative modes of fishing – respectively, beach, pier, private boat, and charter boat – is chosen. An unordered multinomial model such as multinomial logit is appropriate, since there is no clear ordering of the outcome variable. Regressors are individual income, which does not vary with fishing mode, and price and catch rate, which do vary by fishing mode and across individuals. The sample of 1,182 people comes from a survey.

Data: http://cameron.econ.ucdavis.edu/mmabook/Nldata.asc

A dataframe contains:

1 Recreation mode choice. = 1 if beach, = 2 if pier; = 3 if private boat; = 4 if charter.

2 Price for chosen alternative .

3 Catch rate for chosen alternative .

4 = 1 if beach mode chosen; = 0 otherwise .

5 = 1 if pier mode chosen; = 0 otherwise .

6 = 1 if private boat mode chosen; = 0 otherwise 1 .

7 = 1 if charter boat mode chosen; = 0 otherwise .

8 = price for beach mode .

9 = price for pier mode .

10 = price for private boat mode .

11 = price for charter boat mode .

12 = catch rate for beach mode .

13 = catch rate for pier mode .

14 = catch rate for private boat mode .

15 = catch rate for charter boat mode .

16 = monthly income

1. Estimate a multinominal logit regresson of fishing mode choice with Income plus a constant. Compute and comments the marginal effects.
2. Estimate a conditional logit model with price and catch rate as alternative varying regressors. Compute and comment the marginal effects of an increase in price of the various modes.
3. Combine the two models. Does the price effects change with respect to the former model?

Task 2. Protests

File: protests.wf1

Data contains:

Protests - number of protests in a firm

Production - measure of industrial production

Changesalary – dummy variable, showing changes in salary in a firm

1. Propose a best model for explaining number of strikes on a frim.
2. Provide a economic analysis of the model.