

QUANTITATIVE ANALYSIS OF POLICY ISSUES

RESEARCH PAPER GUIDELINES

Proposal due March 13, 2003

Draft due April 17, 2003

Final Draft due May 8, 2003

Presentations will be the week of May 8, 2003

In order to develop confidence in using the tools learned in this course, you must complete a research paper on a topic of your choice. Once you have picked an appropriate topic, you must identify an appropriate data set, and perform an analysis of the data using the tools you have learned. In picking a topic, be sensitive to issues of model specification, data limitations, and legal/policy environments in which the data are collected. Ideally, you should develop and identify a treatment and control (or comparison) group that will allow you to draw conclusions on the policy you are studying.

Your research proposal should discuss the issue you want to investigate, the data you hope to use, and what you expect to find. This should be no more than a page in length.

Your research paper should be structured as follows:

Part I: Background material and discussion of the policy/problem to be studied. This could include a short literature review, and a framing of the policy issues involved.

Part II: The data. What data are you using? Where is it coming from? When was it collected? Why are you using it?

Part III: Describe your data. Present sample means, compare the two (or more) groups under question, and perform simple descriptive tests (like t-tests, chi-square tests). Explain your results, and discuss the limitations of this simple analysis.

Part IV: Build a model. Present your regression model, what techniques you will use (linear regression, a non-linear model, logit/probit model, IV estimator, etc....), and describe why you include certain variables. Also, explain why you use those techniques. In addition, you should test for violations of the assumptions of the classical linear regression model and correct your analysis appropriately. And last, present your estimates.

Part V: Conclusions. What have you found with your analysis?

The paper should be no more than 10-15 pages (including tables). Do not get too complicated or carried away with your model (remember the principle of parsimony), and evaluate only one or two measures of the policy you are looking at. Be sure to give me a call or email if you are unclear on what you need to do, or how to handle a problem in STATA (you can also use E-views, SPSS, or SAS if you like).

Data Issues.

You will need to pick an appropriate data set for your paper, and you should spend a good amount of time looking for the appropriate match.

Some data sets you might find helpful are:

Education:

National Education Longitudinal Study of 1988 (NELS:88). I have a copy of this in my office.

The California basic Education data set and Stanford 9 results.

National Longitudinal Study 1972 - A survey of the class of 1972, following them through their adult lives.

Census/Current Population Survey Data:

Public Use Micro Sample (PUMS) at the 1% and 5% level for 1970, 1980, and 1990. These data are from the long form of the census, and would have information on wages, educational attainment, and other personal factors. It is large, and bulky. Extracts from the Census can be obtained on line from www.ciesin.org. Look for the section on social indicators, pick your variables, and they will send you a data set in ASCII format.

Current Population Survey (CPS): The CPS is done on a monthly basis, and has a series of questions on personal characteristics, but also special supplements on topics of special interest (Language ability, employment status, fertility, health care provision and use, education, etc....). Extracts from the CPS can be obtained from the Bureau of the Census' web site www.census.gov.

Other Data Sets

There are other data sets, and I have a listing of all the data supported by the ICPSR, a consortium of universities which Maryland is a part of, and which the Data Archives at BSOS support (i.e. if the data is in the ICPSR, then Maryland can get it for you – however come talk to me before you approach BSOS). You can visit their web site also by going to www.icpsr.umich.edu. Be careful to pick data sets that are already here at the university, and possibly even ones you are closely familiar with. Also, be sure to take a very close look at the codebook and questionnaire for the data set. Keep in mind that the hardest part of any study is getting the data and getting that data into shape; so please, please, please, pick your data set soon.