ECON 390
Introduction to Economic Research
Assignment #2:
Part A (Due October 23, Monday): Submit a data set in csv format (5 points)

1) Your data can be cross sectional or panel data. In the case of cross-sectional data, please try to find at least 2 to max of 4 explanatory variables. Oftentimes you may not find all variables (you think can affect the dependent variable) in one data file; you may have to look for other sources and join or merge the two data sets (by some common variable).
2) If your data is cross sectional, try to find an instrument variable, Z. If your data is panel data then Z is not that important (but if you can find one that is better).
3) Try to find micro data, particularly if your data is cross sectional. If the data is panel, then at the province, state or country level is also OK.

Potential Data Sources:

Environmental Protection Agency (EPA), Bloomberg, DataStream, Bureau of Labor Statistics, Statistics Canada, Federal Reserve, Bank of Canada, World Bank. WHO, Center for Disease Control, National Bureau of Economic Research, Our World in Data and different university sites. If you are an international student, you can also look for data from your respective countries.

Part B (Due November 3): Preliminary Data Analysis or Descriptive Statistics (10 points)

1) Descriptive Statistics: graph showing the relationship between X and Y. Please refer the Lecture notes (rmd or html files) for potential analysis (showing data trend).
2) As appropriate show data trend with mean values. Or any other appropriate graph(s) displaying data trend.

Part C: Extension. This can be a part of your midterm and potentially final too. If you submit your partial work as a part of Assignment 2, then we can provide you early feedback.

1) Cross-sectional analysis with instrument variable (IV).
2) Panel data analysis with or without IV.
3) Difference in Difference Analysis. This analyzes the effectiveness of some government policy. You need data for both treatment group (where policy is applied) and control group (where no policy is applied) and both before and after the policy implementation. Example: Effect of foreign buyers' tax on housing prices. Say city A has the tax but not city B.
4) Regression Discontinuity Design: Example: effect on traffic accidents of age limit on drinking, say 21. The variables in this case are: traffic accidents, age of the driver involved in the accidents (and potentially other related variables). When you draw a graph with age in X and traffic accidents in Y, you may get a jump (kink) at age 21.