Homework #2

Due 8am Wednesday Sept 14, 2016 Econ B2000, MA Econometrics Kevin R Foster, CCNY

Remember, there is Stats Diagnostic Test on Hawkes due Sept 19.

Each student should submit a separate assignment, even if it is an identical computer file to the rest of your study group. When submitting assignments, please include your name and the assignment number as part of the filename. Please write the names of your study group members at the beginning of your homework.

- 1. What are the names of the people currently in your study group?
- 2. Using the PUMS data, what proportion of people* with less than a college degree earn less than \$75,000 income? Above? What proportion of people with a college degree make more or less than that? (example of code is p.43 of lecture notes) * I'm using "people" but you can define that more carefully do you mean working age people? Men/women? Within particular boroughs or even neighborhoods? What neighborhoods are most unequal? Most equal? What else is going on, driving these results?
- 3. Find some additional data for a Benford's Law analysis (hint: for many economic and financial variables, take the change rather than the level), graph it. Consider how likely it is, to follow Benford's Law - can you suggest some measure? (example on p.51 of lecture notes)

I'll keep this assignment short since you should complete the Stats Diagnostic Test.

4. *Extra* – some of you may have completed the Diagnostic Test already so you have time to push on. Ranking NYC neighborhoods by simple measures like average income is easy (do it, to make sure) with the PUMS data. How might you measure income inequality? How much do rankings of inequality change, for slightly different measures? What if you used different measures of income – for instance sometimes researchers subtract housing expenditure. Or measures of capability (so income adjusted by education). How does inequality of income correlate with other factors, what patterns do you see? For a bit of fun, what subway line is most unequal?