**General Exam Applied Problem for Yulia Sidi**

**Given on 1/6/2019 for General Exam to be taken on 1/14/2019**

Prepare a presentation of about 20 minutes of all the results. Be prepared to explain/justify your results to the examining faculty, keeping on hand (on your computer) supporting analyses that you have not included in your presentation due to time limitations.

The paper “Childhood Environment and Gender Gaps in Adulthood” shows “*that differences in childhood environments play an important role in shaping gender gaps in adulthood by documenting three facts using population tax records for children born in the 1980s*” and that “*childhood disadvantage – growing up in a poor family, a single-parent family, or a neighborhood with concentrated poverty – has particularly negative long-term effects on boys relative to girls*.”

The paper, data, and codebook are provided. For the general exam, you have to use the data in order to demonstrate the paper’s conclusions, and produce new results from the available data.

Use the w2\_pos\_30 indicator variable to determine employment rates.

Answer the following questions:

1. Create Figure 2 in the paper to show employment rates at age 30 by parent income quintile for men and women who grew up in the New York City and Charlotte. Create a similar plot for Boston versus Bridgeport. Comment on the findings.
2. Create Appendix Figure 4 B, to depict Income Percentile Rank by parent household income percentile (PHIP).
3. Run a regression model in which college attendance rate is the response, and in addition to PHIP, consider adding other explanatory variables from the list of 28 covariates in the codebook. You do not have to use all the variables, and you can try different models. Summarize the regression results.
4. Use the columns e\_rank\_b\_kir26\_m\_p25 and e\_rank\_b\_kir26\_f\_p25 to explore the difference between men and women in terms of the expected percentile of income at age 26, if the parents are at p25. Do this by region – Northeast, South, Midwest, and West. Comment on your findings.
5. Create additional plots and analyses to answer question(s) that are of interest ***to you***, based on this dataset.