# Final Paper

## Due 5/6

## Purpose

The purpose for this assignment is for you to apply the breadth of skills that we have learned in this class in one single research project.

#### Knowledge and Skills

The purpose of this assignment is to help you practice the following skills that are essential for conducting your own research:

- Find quantitative data relevant to political topics
- Process and clean data in the statistical program R
- Conduct exploratory data analysis in R, including data visualization
- Conduct data analyses, including linear regression

### Tasks

To complete this assignment, you will do the following:

- Lay out what your research question is and why it is important.
- Briefly summarize what we already know about your research question, and what we do not know.
- Describe in detail what data you use to answer your question. Describe the dependent and the main independent variables in detail, including descriptive statistics and summary graphs. Mention the source of the data and discuss any processing and cleaning you did with the variables.
- Discuss your control variables. This should include explanations of how they could confound your analyses (and thus need to be included in the analyses), as well as a description of the source of the data and discuss any processing and cleaning you did with the variables.
- Describe how you analyzed the data (e.g. regression, correlation, and so on).
- Provide an answer to your research question based on your data analysis.

To help you along the way, you will submit reports about the individual steps throughout the semester (approximately every 2 weeks). The memos will cover: your research question and potential confounders, your data, data cleaning, descriptive statistics, bivariate relations, (first) regression results.

There is no minimum or maximum length for the paper. Be as brief as possible, as long as necessary. Use graphs and non-technical language as much as possible. Someone who has no background in statistics or data analysis should be able to understand everything that is in your paper.

In addition, you will also submit data and R code that allows me to reproduce all numbers, graphs, tables, etc. that are in your paper.

## Criteria for Success

To be successful in this assignment, imagine a reader who has no idea what you have worked on all semester and who has no background in statistics and data analysis. After reading your paper, such a reader should understand what your research question is and why it is important, what we already know (and don't know) about the question, how your data was collected and how you processed it, and what the answer to your question is.