17.871
Spring 2014
Group Projects

Assignment summary

Working with your assigned group, answer the question posed to you *with regression analyses*. You will hand in draft slides of your presentation (see the next page) by *noon* on Monday, April 7 and will give a 15-minute presentation on your work in class on that day. Your group will also turn in a 10-page, double-spaced written report on your project on Friday, April 11. (Please e-mail a copy to me and Jeremy by 5:00 pm as either a Word or pdf document. (Word is preferred because it is easier to make comments.) You will also attach your Stata do file and data file that will allow us to replicate all the tables and graphs in your papere.

The 10-page limit includes tables, figures, and bibliography. The report should be in the form of a (mini) term paper meaning, among other things, that it should follow the format described by Kate Turabian, *A Manual for Writers of Term Papers, Theses, and Dissertations*. The paper should cover the same material as the presentation, which is outlined below ("The five slides").

Data requirements

The data set you create must have least 30 cases and at least *three* explanatory variables.

Analysis requirement

In addition to describing your variables, you must run a multivariate regression and report the resorts in the oral and written presentations.

Statement about Collaboration

You are encouraged to seek and extend as much help as you can, both within and between groups. I expect you to be meticulous in citing the written work of others that you use.

Grading

We will assign a letter grade to each group's project. That will be the grade you receive, plus or minus an adjustment that will be determined as follows: We will ask each member of the group to indicate the relative amount of effort each person contributed to the successful completion of the project. If someone in the group stands out as being a conspicuous over-contributor or under-contributor to the group effort, that person's letter grade will be adjusted upward or downward as appropriate.

Grading rubric

Writing/Organization - 30 points
Literature Review - 15 points
Data Collection - 15 points
Data Analysis - 20 points
Data Presentation - 20 points

Presentations: The five slides

Your presentations should consist of the *five* slides.

1. Research question
    - Pose your question
    - What is the current state of academic thinking about your question?
    - Develop a hypothesis about one key explanatory variable
    - Explain why it's important to democracy, public policy, etc.
2. Research design
    - Describe dependent variable, key explanatory variable, control variables (justify the controls)
    - Descriptive statistics (recode all to 0-1, present means and sds)
3. Bivariate relationship for key variable
    - Scatter plot for continuous variables, box plots or crosstabs for nominal variables, label axes, label data points
    - Present and *interpret* bivariate coeff. (include a sentence on the slide), put regression line on scatter plot
4. Present and *interpret* multivariate regression coefficients
    - Raw Stata output is okay, but only this time!
    - Does adding the control variables to your regression change the results? Why? Interpret the coefficient with a sentence on the slide.
    - Interpret SER (include a sentence on the slide!)
5. Conclusion
    - What's the most important inference?
    - What are the policy implications or implications for democracy?
    - How strong of an inference can we draw? Problems? Alternative explanations?
        - Internal validity? (Nonrandom selection and reverse causation)
        - External validity?

- Please practice your presentations and ensure that you are under 15 minutes!
- Bring copies of your slides for everyone in class.

Some final notes

For variables that have been rescaled to vary between 0 and 1, interpret the coefficient as a shift from the minimum to the maximum leads to a (?) change in (dependent variable). In the past, I noticed a few

groups instead using the phrase “one unit change” with rescaled variables. Although this is technically correct, the minimum to the maximum language is more informative for readers.

1. When interpreting your results, be very careful about whether your variables are percentages or not. Sometimes groups will interpret their coefficients and their SER in terms of percent change even though the variables were not percentages. The interpretation of the coefficients and the SER are always in the unit of the variables (with the exception of log variables). So, if your variables aren't percentages (or proportions), don't use percentage language in your interpretations.

2. Don't forget to include a brief literature review. The main point of the literature review is to discuss the most important works relevant to your research question.

3. For this paper, you can paste Stata output straight into the paper. However, make sure you convert the typeface to Courier (or another fixed-width font), so that it will be legible. Please paste in the output of the “summary” command for the variables used in your regressions (so we can see your Ns, means, standard deviations, and ranges).

Finishing group projects can be difficult interpersonally. A surprisingly useful trick is to be kind in all your interactions with group members.

Project 1: The Failure of Gay Marriage Restrictions in Minnesota

Names: Bey, Hadfield, Wilson

Question: What explains support for the proposed constitutional amendment that failed in Minnesota in 2012, declaring marriage to be between one man and one woman?

Possible explanations

- *Education.* Better-educated people are generally more tolerant of alternative lifestyles.
- *Religiosity.* People who belong to religious denominations that take a more traditional view of marriage will support restrictions on gay marriage.
- *Gay populations*. Gay people are less likely to favor restrictions to their marrying. (You would think this is obvious.)
- *Ideology.* Conservatives are in favor of restrictions, liberal against.
- *Age.* Younger people are less invested in traditional social institutions.

Data sources

- *Minnesota Secretary of State web site*. This will be the source of election returns from counties that can be used to measure support for the constitutional amendment across the state.
- *Census Bureau.* Using the American FactFinder web site, you can find all sorts of data to help measure average education, plus perhaps find proxies for the percentage of a county's population that is gay.
- *Association of Religion Data Archives*. Data about the number of denominational adherents in each county.

Bibliographic example

- Campbell, David E., and J. Quin Monson. "The Religion Card Gay Marriage and the 2004 Presidential Election." *Public Opinion Quarterly* 72 (2008): 399–419.

Comments/hints: A major issue is the unit of analysis. Because this pertains to a particular state, it's unlikely you can rely on public opinion data. A reasonable way to proceed is to look at the county level, and explain variation in the percentage of voters who favored the anti-gay-marriage constitutional amendment in 2012.

Project 2: Explaining the Decline of President Obama's Approval Ratings

Names: Halloran, Johnson, McCray

Question: Why have President Obama's approval ratings fallen, and have they fallen in a way that is different from recent presidents?

Possible explanations

- *Coalition of minorities.* Over time, you tick off the groups that had supported your election, so that decline in approval is common for all presidents.
- *Rally events.* Presidents get more popular when the country is threatened with harm. The lack of these "rally around the flag" events has hurt Obama's popularity.
- *Economic conditions*. Obama has suffered from the fact that unemployment is high.

Data sources

- *Roper Center web site.* Has a page that collects public opinion soundings about presidential approval.
- *Bureau of Labor Statistics.* The official source of economic data, including unemployment and inflation.

Bibliographic example

- Mueller, John E. "Presidential Popularity from Truman to Johnson." *American Political Science Review* 64 (1970): 18–34.

Comments/hints: The media are constantly full of claims and speculations about the rise and fall of presidential popularity. All this chattering rarely takes into account the political science literature on the matter. The journal article above was a path breaker, and has been emulated from time-to-time as new presidents come along. A replication of Mueller's article, using more modern data, is a place to start. But, one opportunity here is to think about new factors that might influence changes to aggregate presidential approval, and to see whether that provides any help in understanding Obama's situation.