

# FLS 6415: Class 11 Homework

November, 2017

Remember to answer all the questions in R markdown and produce a PDF. Email your completed homework (R markdown file and PDF) to jonnyphillips@gmail.com by midnight the night before class. Remember to refer to the example code from this week and the last couple of weeks for coding guidance.

There is no quantitative/coding analysis this week. The questions below encourage you to think about the article by Levitsky and Way (2010) in the same causal inference framework as for the previous weeks.

1. What are the treatment and outcome variables in Levitsky and Way (2010)? Define the potential outcomes  $Y_0$  and  $Y_1$  for their study.
2. Describe the treatment assignment mechanism.
3. The confounders Levitsky and Way identify are informed by alternative theories that might explain the fall of a ruling party. List the theories that you can identify and the associated variables/measurement that they seek to show balance on.
4. Pick two of the confounders you identified in Q3 and do some quick research online to get quantitative estimates of the value of these confounders for each of the four countries (eg. if population growth was a factor you could look up population growth rates for each country...). Create a very simple table and use it to assess if you think there is actually balance.
5. From your quick research in Q4 and your knowledge, which of the cases would be paired together if we had applied a one-to-one matching strategy with some form of nearest-neighbour matching? *Hint: Don't use any code, just make a judgment.*
6. One assumption we made in the first class was SUTVA (Stable Unit Treatment Value Assumption), which means that the treatment of unit  $i$  does not affect the potential outcomes for unit  $j$ . Is this assumption likely to be valid for their research question? Provide a real-world example to support your point.
7. One potential confounder is natural resources, which might make violent revolution more likely (as groups fight to control the resource) AND might make ruling parties less likely to collapse (as they have more resources to support their dominance). Imagine that Zambia had much more natural resources than Zimbabwe. Would this pattern of imbalance be a risk to Levitsky and Way's research design? Why/why not?
8. Levitsky and Way do not describe in detail their case selection process. Describe what you think are the main reasons for their choice of cases.
9. How generalizable to other cases of competitive authoritarian ruling parties are their findings? Pick one of the confounders you measured in Q4 and compare the cases to values for a few other competitive authoritarian regimes to see how representative they are. *Hint: Just pick a few examples at random, no need to calculate a mean or anything.*
10. Identify another country case that would support Levitsky and Way's argument, and explain why it supports their argument. OR identify a country that would undermine their argument, and explain why it undermines their argument. *Hint See Here* for a list of countries by regime type (competitive authoritarian is basically 'anocracy').
11. One strategy King, Keohane and Verba suggest for improving causal inference is to increase the number of observations *within* our cases. Provide one suggestion for how we might get more observations to test their theory even if we stick with the country cases of Kenya, Mozambique, Zambia and Zimbabwe.

12. Interpret the events of the last week in Zimbabwe - do they support or undermine Levitsky and Way's argument?