

Time Series and Panels: Lab 3

Due on June 6, 2023

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Problem 1

Democratic Peace

Carefully read Allan Dafoe's critique of Erik Gartzke's work on the democratic peace. Identify the key issues of panel and time-series methodology that drive the disagreement, and discuss the overall persuasiveness of the evidence on these issues. Are there any further modeling issues that deserve attention in this debate beyond those addressed by Gartzke and Dafoe?

Problem 2

Civil War and Education

Consider Lai and Thyne's panel analysis of whether civil war causes educational deficits. The replication data for this study are available at the Dataverse. Describe three time-series or methodological issues that are not adequately addressed in the original article. Carry out some kind of appropriate test for each issue and explain your results.

Problem 3

Civil War and Education II

Using the Lai and Thyne panel data, set up the R code for an analysis using one of the following: a multi-level model, a panel VAR, or multiple imputation.

Then, construct your own model of the effect of civil war on educational expenditures, potentially using the structure you set up in the first part of this question. Explain why you have constructed the model the way that you have. Provide R code and, if possible, results.