A Comparison of Dynamic Count Regression Models

Scholars regularly encounter dynamic count data in applied settings. Modelling the autoregressive properties of these data using regression can be confusing, however, as multiple generalizations of the linear autoregressive model exist. We compare multiple models from different disciplines for dynamic count data using Monte Carlo simulations. With some advice from our friends in the stats department, we hope to develop clear guidance on choosing between these types of models for applied scholars.

About the Speaker

I am an assistant professor in the Department of Political Science at the University of Georgia. I received my PhD from Texas A&M University in American Politics and Research Methodology in 2019. I pursue a dual research agenda in judicial politics and political methodology.

My substantive research confronts the puzzle of constitutional courts invalidating the actions of legislatures and executives in the shadow of punitive measures by those branches of government. I also have an interest in the selection and retention of judges. While my theoretical contributions are generalizable across all courts, my research primarily relies on data relating to American courts.

My methodological interests focus on modelling observational data that exhibit dependence, both serial and spatial. In particular, I am developing a number of specification tests that are either the first of their kind or greatly improve upon existing tests. Long-term, I am working to create a truly general-to-specific modelling strategy that is applicable to time series, cross-sectional, and time-series cross-sectional data.