Title: Synthetic Historical Control for Policy Evaluation without Cross-sectional Controls

Yi-Ting Chen (National Taiwan University) Jui-Chung Yang (National Taiwan University) Tzu-Ting Yang (Academia Sinica)

Abstract: We propose a synthetic historical control (SHC) method for policy evaluation in the absence of cross-sectional controls. This method predicts the counterfactual of the treated unit by replacing the infeasible cross-sectional controls of the synthetic control method with a set of historical controls based on a flexible time-series model. This model accounts for not only observed control variables but also a latent time-varying component in addition to the time-varying intervention effect. We illustrate the usefulness of our method using a Monte Carlo simulation and empirical applications.