

**Estimating a Dynamic Game of Electoral
Competition with Imperfect Monitoring:
Evidence from U.S. Mayoral Elections**

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June 10, 2018

Abstract

This paper provides a new approach for estimating a general version of the Banks & Sundaram model of electoral competition. We develop a new maximum likelihood estimator for this class of model that is consistent with the fact that equilibria may be in mixed strategies. We show that the model can be estimated as long as we observe a single outcome measure that is observed by the voters and the econometrician. Our empirical analysis is based on a novel data set that we have assembled based on all mayoral elections in large U.S. cities between 1951 and 2017.

KEYWORDS: Dynamic Elections, Stationary Equilibrium, Imperfect Monitoring, Responsive Democracy, Accountability, Optimal Retention, Agency, Computational Game Theory.