



A heteroskedastic model for estimating house effect from Italian pre-electoral poll data

Domenico De Stefano

DiSPeS, University of Trieste, Italy - ddestefano@units.it

Francesco Pauli

DEAMS, University of Trieste, Italy - francesco.pauli@deams.units.it

Nicola Torelli

DEAMS, University of Trieste, Italy - nicola.torelli@deams.units.it

Abstract

We consider pre-electoral polls for Italian general elections of 2013 with the aim of shedding light on pollsters behavior. We compare vote share prediction variability across parties and pollsters and model how this variability changes over time. Estimates of a Bayesian hierarchical model showed that a large portion of the total variability of vote share predictions is explained by the so-called house effect. Furthermore we noted that the variability of vote share predictions slightly reduces over time as the election day approaches.

Keywords: hierarchical Bayesian model; house effect; Italian elections; spline.