Empirical Evidence Concerning the Finite Sample Performance
of EL-Type Structural Equation Estimators

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Abstract

This paper presents empirical evidence concerning the finite sample performance of empirical likelihood-type estimators when the estimating functions are well-over determined. There are suggestions in the literature that traditional and non-traditional asymptotically efficient estimators based on moment equations may, for the relatively small sample sizes usually encountered in econometric practice, have relatively large biases and provide an inadequate basis for estimation and inference.   Given this uncertainty we use a range of data sampling processes and Monte Carlo sampling procedures to accumulate some finite sample empirical evidence concerning these questions for a family of empirical likelihood-type estimators.

Keywords: Unbiased moment based estimation and inference, empirical likelihood, empirical exponential likelihood, semiparametric models, conditional estimating equations, finite sample bias and precision, squared error loss, instrumental conditioning variables.

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