

The simulation extrapolation method for fitting generalized linear models with additive measurement error

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Abstract. We discuss and illustrate the method of simulation extrapolation for fitting models with additive measurement error. We present this discussion in terms of generalized linear models (GLMs) following the notation defined in Hardin and Carroll (2003). As in Hardin, Schmiech, and Carroll (2003), our discussion includes specified measurement error and measurement error estimated by replicate error-prone proxies. In addition, we discuss and illustrate three extrapolant functions.

Keywords: st0051, simulation extrapolation, measurement error, instrumental variables, replicate measures, generalized linear models

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