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Estimation of a censored dynamic panel data model.
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Panel data models have a long history in econometric and have become increasingly popular in empirical economic over the past two decades. Panel data expand our opportunities to study more complex economic relationships by, for example, allowing for individual heterogeneity and dynamic feedback. These goals are often achieved by including in the model individual specific effects and lagged dependent variables. These two features of the dynamic panel data model, however, often create difficulties in estimation. This paper makes a contribution to the literature on the estimation of nonlinear dynamic panel data models. Specifically, a method for estimating a censored dynamic panel data model with individual fixed effects and lagged latent dependent variables, is proposed. Censoring destroys a certain symmetry between the latent variables. It is shown in this paper that one can artificially truncate the observations in such a way that the symmetry is restored.

Based on the restored symmetry, orthogonality conditions are constructed and generalized methods of moment (GMM) estimation can be implemented. Although it is hard to prove identification for nonlinear GMM, the author shows that, based on the moment conditions, one can still construct valid asymptotic confidence intervals for the parameter of interest. The model under consideration is relevant for many empirical applications. The proposed method is illustrated by estimating a model of earnings dynamics using the matched data from the Current Population Survey and Social Security Administration earnings record.

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Note: This list reflects references listed in the original paper as accurately as possible with no attempt to correct errors.