Domínguez, Manuel A.; **Lobato, Ignacio N.**

Consistent estimation of models defined by conditional moment restrictions. (English)

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Summary: In econometrics, models stated as conditional moment restrictions are typically estimated by means of the generalized method of moments (GMM). The GMM estimation procedure can render inconsistent estimates since the number of arbitrarily chosen instruments is finite. In fact, consistency of the GMM estimators relies on additional assumptions that imply unclear restrictions on the data generating process. This article introduces a new, simple and consistent estimation procedure for these models that is directly based on the definition of the conditional moments. The main feature of our procedure is its simplicity, since its implementation does not require the selection of any user-chosen number, and statistical inference is straightforward since the proposed estimator is asymptotically normal. In addition, we suggest an asymptotically efficient estimator constructed by carrying out one Newton-Raphson step in the direction of the efficient GMM estimator.

MSC:

91B82 Statistical methods; economic indices and measures
62G05 Nonparametric estimation

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