Bayesian Averaging of Classical Estimates in Asymmetric Vector Autoregressive Models

Manuel Leonard F. Albis

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School of Statistics
University of the Philippines
Diliman, Quezon City

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ABSTRACT

Omitting an important variable in a model yields biased coefficients that will yield misleading forecasts and incorrect variable relationships. Even though the VAR model views all considered variables as endogenous, it does not address the problem of omitted variable bias. This paper extends the BACE, a robustness procedure in cross-section data, to a vector time-series that is estimated using a large number of AVAR models, in order to achieve a robust analysis. The results of the simulation suggest that, if an important variable was omitted, the proposed procedure is better in forecasting than models that were specified by an automatic selection procedure.

Keywords: BACE, AVAR, Robustness Procedures