

Automatic Selection of Multivariate Dynamic Econometric Models

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Abstract

Automatic general-to-specific selection of univariate dynamic econometric models is now well established and available in PcGive. This has been extended in several directions, including adding impulse dummies for every observation and more variables than observations. We consider extension of these procedures to the multivariate setting. The starting point is the unrestricted reduced form, captured by the vector-autoregression, possibly with additional unmodelled variables. At this first stage a variable either enters all equations or none. The next stage can be the simultaneous equations model, where each variable is treated individually in each equation from the perspective of the entire model. We discuss the role of identification. Some applications illustrate how the procedure works in practice.