Disentangling Demand and Supply Shocks in the Crude Oil Market: How to Check Sign Restrictions in Structural VARs
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Given the growing dissatisfaction with exclusion and long-run restrictions in structural vector autoregressive analysis, sign restrictions are becoming increasingly popular. So far there are no techniques for validating the shocks identified via such restrictions. Although in an ideal setting the sign restrictions specify shocks of interest, sign restrictions may be invalidated by measurement errors, data adjustments or omitted variables. We model changes in the volatility of the shocks via a Markov switching (MS) mechanism and use this devise to give the data a chance to object to sign restrictions. The approach is illustrated by considering a small model for the market of crude oil.