

Christmas Workshop Energy Finance 2016 | December 12th – December 16th | Abstract

Jumps detection and prediction of electricity spot prices under the Bayesian SVLEDEJX model

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Abstract:

In the study, the Bayesian stochastic volatility model with normal errors, a leverage effect, a jump component with a double exponential distribution of jump values and exogenous variables (SVLEDEJX) is applied to model electricity spot prices. The results of Bayesian estimation, jump detection and forecasting are presented and discussed. The impact of exogenous variables on electricity spot price dynamic and jump detection is explored. Moreover, the leverage effect and the stochastic volatility clustering are tested.