The dynamics of hourly electricity prices*

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Abstract

We examine the dynamics of hourly electricity prices in day-ahead markets. In these markets, the market microstructure does not allow for continuous trading. Instead agents have to submit their bids and offers for delivery of electricity for all hours in the next day before a specified market closing time. The same set of information is used for quoting all hours of the following day. Therefore, it is not appropriate to apply directly a time-series approach to the hourly time series. We suggest the use of dynamic semiparametric factor model for hourly electricity prices in day-ahead markets and examine their characteristics.

Key words: Power markets, Dynamic semiparametric factor models, Day-ahead electricity prices

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