

Huang, Chuangxia; Gong, Xu; Chen, Xiaohong; Wen, Fenghua
Measuring and forecasting volatility in Chinese stock market using HAR-CJ-M model.
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Summary: Basing on the heterogeneous autoregressive with continuous volatility and jumps model (HAR-CJ), converting the realized volatility (RV) into the adjusted realized volatility (ARV), and making use of the influence of momentum effect on the volatility, a new model called HAR-CJ-M is developed in this paper. At the same time, we also address, in great detail, another two models (HAR-ARV, HAR-CJ). The applications of these models to Chinese stock market show that each of the continuous sample path variation, momentum effect, and ARV has a good forecasting performance on the future ARV, while the discontinuous jump variation has a poor forecasting performance. Moreover, the HAR-CJ-M model shows obviously better forecasting performance than the other two models in forecasting the future volatility in Chinese stock market.

MSC:

91B84 Economic time series analysis
91B74 Economic models of real-world systems (e.g., electricity markets, etc.)

Cited in **15** Documents

Full Text: [DOI](#)

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