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Moving Average-Based Estimators of Integrated Variance

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Abstract

We examine moving average (MA) filters for estimating the integrated variance (IV) of a financial ntaminated with ma iduals must be scale to be consiste ut the integrat sumptions, such a s an exte misspec with rounding ficient returns. ealized kernel e te the misspec

Keywords: Bias correction | High-frequency data | Integrated variance | Moving average | Realized variance | Realized volatility

JEL Classification: C10 | C22 | C80

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Notes

[1]Within TTS, Griffin and Oomen (2008) further distinguish two categories: In the first (transaction time sampling), $t_{i,m}$ is the time of a transaction; while in the second (for which they reserve the term, tick time sampling) $t_{i,m}$ is the time of a quote revision.

[2]Andersen et al. (2001) experiment with unfiltered and also linearly interpolated five-minute returns, finding similar dynamics in all cases. Nevertheless, sampling NYSE data at five-minute intervals, they find a median moving-average coefficient of −0.214 (+ 0.214 is an IID noise, th

[3]The ma es. Graphs giving th

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