JOURNAL ARTICLE

Leverage and Volatility Feedback Effects in High-Frequency Data

Get access

Tim Bollerslev , Julia Litvinova , George Tauchen

Journal of Financial Econometrics, Volume 4, Issue 3, Summer 2006, Pages 353–384, https://doi.org/10.1093/jjfinec/nbj014

Published: 16 May 2006 **Article history** ▾

Abstract

We examine the relationship between volatility and past and future returns using high-frequency aggregate equity index data. Consistent with a prolonged "leverage" effect, we find the correlations between absolute high-frequency returns and current and past high-frequency returns to be significantly negative for several days, whereas the reverse cross-correlations are generally negligible. We also find that high-frequency data may be used in more accurately assessing volatility asymmetries over longer daily return horizons. Furthermore, our analysis of several popular continuous-time stochastic volatility models clearly points to the importance of allowing for multiple latent volatility factors for satisfactorily describing the observed volatility asymmetries.

Issue Section: Articles