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A multivariate jump-driven financial asset model

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Abstract

We discuss a Lévy multivariate model for financial assets which incorporates jumps, skewness, kurtosis and stochastic volatility. We use it to describe the behaviour of a series of odel. Starting er deviations from nor me-change techniqu f the model is the fa utral depe surpri

Keywor

Notes

†For an extensive discussion of the economic interpretation of time change and its relationship with the market activity, see Geman and Ané (2000).

†Note that in theory we can make the Brownian motions depedent on each other (as in Madan and Seneta (1987)). However, this would lead to a quadratic incerase in the parameters and would generate an estimation problem of the correlation structure, as discussed before.

‡Extensions to common stochastic voltaility time changes can be part of future research.